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PLAGUE REPORTS

Of H. A. L. Ryfkogel, M. D., Bacteriologist to State Board of Health of California.

Oakland, Cal., July 27, 1900.

To the Honorable, the State Board of Health, California—

GENTLEMEN: In accordance with your orders to attend all autopsies on the bodies of persons suspected of having died with pest, and to make such bacteriologic investigations as would establish the nature of the infection causing death, I was present on July 6 in the City and County Hospital of San Francisco, at the autopsy on the body of Lee Wing Tong.

The man had been admitted to the hospital July 4, with a history of four days' illness, two of which had been spent in bed. He was suffering with high fever, delirium, and a large inguinal swelling on the left side. Fluid was aspirated from the gland while the man was yet alive, and injected into a guinea-pig. The guinea-pig died in sixty-two hours, with lesions that will be later described. The Chinaman died at 6:00 A. M., on the morning of July 6, and the autopsy was performed five hours later. A complete description of the autopsy findings accompany this report, but I will briefly summarize them here.

The man was of middle age and well nourished. In the left inguinal region there was a large swelling, twelve cm. by nine cm., composed of edematous tissue, in which were embedded a dozen or more enlarged lymph glands, the largest being the size of a crab apple. In the interior of the glands were large numbers of ptechial hemorrhages. On the right side were a few more glands of the same type; one just above the left Poupart's ligament and a few in the right axillary spaces were also found. The remaining noteworthy changes in the tissues were an enlarged and softened spleen, with enlarged Malpighian bodies (infectious splenic swelling), and severely-congested, almost pneumonic, lungs. The heart's blood was fluid. The man presented, in brief, the post-mortem appearances of a severe infection specially localized in the lymphatic glands. No changes attributable to typhoid fever could be found in the intestines. Sections and smears were made from lymphatic gland, spleen, liver, lung, and kidney, and smears from the heart's blood. Agar plates were prepared from the heart's blood, lymphatic gland, and spleen. Guinea-pigs were inoculated with heart's blood and filtered tissue emulsion from lymph gland and spleen. The following are the results of these various procedures:—

Sections: Lymphatic gland showed intense inflammation, as evidenced by engorged blood-vessels and great numbers of polynuclear leucocytes. Enormous numbers of bipolar bacilli that decolorized by Gram's method were present. Kidney sections showed slight cloudy swelling and engorged blood-vessels, but were otherwise normal. Liver also showed engorgement and cloudy swelling, but no other change. Lungs showed congested blood-vessels and some collapsed air cells; in other cells were free leucocytes and epithelial cells. Spleen showed dilated and engorged sinuses, hypertrophied Malpighian bodies. In fact, there was no lesion of any single organ to account for death. The man had evidently died of acute infection. Smears: In smears made from the enlarged lymph glands enormous numbers of bacilli could be seen. The organisms possessed rounded ends and stained deeply at the poles, leaving a clear space in the center. In size they varied from one to one and one-half microns in length. A few of the same type of organisms could be seen in the spleen. Plates and Sub-cultures: Plates from lymph gland showed a few colonies of staphylococcus pyogenes aureus and albus and a great many colonies that in twenty-four hours were small and transparent. Later these latter became slightly grayish, with iridescent edges. By transmitted light they showed a brownish center, with almost colorless periphery. The colonies were finely granular and had slightly irregular margins. They were exactly like the colonies of bacillus pestis. Plates from the spleen showed many colonies of the same type, together with a few of the bacillus coli communis. The heart blood also showed a few colonies of this type. Characteristic colonies from each of these sources were picked off and carefully studied. The microscopical and cultural characteristics were identical, and as follows:—

The organism was a bacillus, with rounded ends, and showed bipolar staining. In size, on agar culture, it varied from one to one and one-half microns in length by one-half to three-quarters of a micron in breadth. In old agar cultures large involution forms appeared. It decolorized when treated by Gram's method of staining. It was aerobic and facultatively anaerobic. It was non-motile, and did not form spores. It stained readily with anilin dye, but best with carbol-thionin. Good results were also obtained with Loeffler's methylene blue and dilute fuchsin. On agar and blood serum it thrived well, as an almost-transparent, but slightly-grayish and sticky, growth. It grew on gelatine at room temperature without causing liquefaction. In bouillon it grew at bottom and sides of tube and on surface in form of flakes and powdery specks, the remaining liquid being clear. Microscopically the growth was seen to be in streptococcus-like chains. When tube on which surface growth took place was shaken, the bacteria sank to the bottom like falling snow. It did not form indol in bouillon and Dunham's peptone solution. Control experiments on the batch of media were made in each instance with two varieties of the bacillus of hemorrhagic septicemia, viz., the bacillus of rabbit septicemia and bacillus of swine plague, and in each series the latter bacillus produced indol, while the one under study did not. The bacillus did not produce gas in glucose agar or glucose bouillon. Milk was not curdled, nor was its reaction changed. When grown on three per cent salt agar, the most remarkable and characteristic swollen and distorted involution forms appeared; rounded, balloon-shaped, dumb-bell, and thick, spiral forms were numerous.

Pathogenesis: Including the guinea-pig inoculated by Dr. Hirschfelder, fourteen animal experiments were made, as follows:—

Experiment No. 1. A guinea-pig, about 600 grms. in weight, and inoculated with fluid aspirated from inguinal gland of the living Lee Wing Tong, July 5, 1900, at 11:00 A. M. Death occurred in 62 hours. The most marked post-mortem changes were pinkish red fluid in peritoneal cavity, numerous ptechial hemorrhages in peritoneum, greatly enlarged spleen, with white nodules on surface and through substance, and enlarged kidneys. Smears from spleen, peritoneal fluid, and heart's blood showed presence of an organism identical in character with that seen in tissues of dead Chinaman. Cultures were readily isolated from this tissue, which were identical in every way with those which came from the tissues of the Chinaman.

Experiments 2, 3, 4, 5, and 6. Guinea-pigs two and three were inoculated with emulsion of spleen and lymph gland respectively; guinea-pig four was treated with heart's blood. The three died in forty-four, forty-six, and seventy-two hours. The bacteriologic findings in each case were the same as in experiment one. In experiments five and six, guinea-pigs were inoculated with third-generation, pure cultures of the bacillus isolated from tissues of Lee Wing Tong. A small loopful of agar culture was in each case placed in a subcutaneous pocket. Animal five died in forty hours, the bacteriologic findings being the same as in the animal injected with tissue emulsion. Animal six was a large 800-grm. pig, and lived five days. The spleen in this case was very characteristic of experimental plague, being enormously enlarged and covered with white spots both on external and cut surfaces.

Experiments 7 and 8. Two full-grown white rats were inoculated with pure, third-generation agar cultures. They died in forty and forty-nine hours respectively. Bacteriologic findings did not differ from previous cases.

Experiment 9. A full-grown pigeon was inoculated with two loopfuls of agar culture. The bird was practically unaffected, and is alive and very well, fifteen days after the experiment was performed.

Experiment 10. A full-grown rabbit was inoculated with pure culture on July 13, and died night of July 16. The bacteriologic findings were the same as in other experiments.

Experiment 11. A guinea-pig, 700 grms. weight, was inoculated on July 14 with a large loopful of agar culture and two cubic centimeters of Yersin's anti-pest serum. This animal is now alive and well.

Experiment 12. Guinea-pig, 700 grms. in weight, used as control to experiment No. 11, was inoculated with a loopful of same culture at same time. It died in six days, with enormous spleen and bacteriologic findings, as in other experiments.

Experiment 13. A full-grown rat was inoculated with third generation of agar culture, obtained from guinea-pig six, which in turn had been treated with the pure culture. The animal died in forty-eight hours. Pathologic and bacteriologic findings remained the same.

Experiment 14. A full-grown rat was inoculated with same culture as rat thirteen, and at the same time, but was treated with Yersin's anti-pest serum; animal is alive and well nine days after its experiment.

Summarizing these experiments, one animal was treated with material from the live Chinaman, three with emulsion of material from same man when dead, eight with pure cultures of the third or fourth generation, obtained from tissues of the Chinaman, and two with pure culture, obtained from tissues of one of the eight animals. Every animal died except the pigeon, which is naturally immune to pest, and the guinea-pig and rat which were treated with the antitoxic serum. In every instance the pathologic findings were approximately, and the bacteriologic findings absolutely, the same. The bacterium isolated from every animal possessed the same characteristics as that obtained from the body of Lee Wing Tong, notwithstanding the fact that it was passed, in one instance at least, through six series of culture and two series of animals. Only one pathogenic bacillus possesses the above microscopical, cultural, and pathogenic characteristics, i. e., the bacillus pestis. Only one pathogenic bacillus approximately resembles it, i. e., the so-called bacillus of hemorrhagic septicemia. The bacillus of hemorrhagic septicemia has never been known to produce disease in man. The bacillus under investigation certainly produced the death of Lee Wing Tong, for he presented all the characteristics of an infection in which a polyadenitis was the most prominent feature, and this organism was the only one present in large numbers. Moreover, this bacillus possesses all the characteristics of the bacillus pestis, which is known to produce just such an infection and polyadenitis. Could the bacillus of hemorrhagic septicemia produce disease and death in the human being, the population of whole districts in Europe and our own Mississippi Valley, the home of swine plague, would be decimated. Many a student and teacher in bacteriologic laboratories would have been infected, for but little care is usually taken with the common laboratory organism, bacillus cuniculicidus. Notwithstanding all these opportunities for infection, there has occurred not a single known case. But there are ample purely bacteriologic reasons why this bacillus is not that of hemorrhagic septicemia, but is that of the pest. Bacillus hemorrhagic septicemia produces indol in bouillon and Dunham's peptone solution. The bacillus pestis and the organism isolated from the tissues of Lee Wing Tong do not. Bacillus hemorrhagica septicemia does not form change in bouillon, while bacillus pestis and the one under study do. Bacillus hemorrhagica septicemia promptly kills pigeons. Bacillus pestis and the one under investigation do not affect them. Yersin's anti-pest serum does not immunize against bacillus hemorrhagica septicemia, but does against bacillus pestis and the one under study. Bacillus hemorrhagica septicemia usually only kills rats and guinea-pigs in large doses, and frequently merely produces an abscess, while bacillus pestis and the bacillus under discussion kill them promptly, and in very small doses. Bacillus pestis and organism under study produce characteristic involution forms when grown on three per cent salt agar. Bacillus hemorrhagica septicemia does not do so. The pathologic changes produced by bacillus hemorrhagica septicemia (so called) are different from those produced by bacillus pestis.

Therefore, the bacillus present in such large numbers in the body of Lee Wing Tong was the bacillus pestis, and as the lesions seen post mortem corresponded with changes that we know the bacillus pestis regularly produces, my diagnosis in the case dying July 6, 1900, is pest.

San Francisco, September 10, 1900.

To the Honorable, the State Board of Health of California—

Gentlemen: I consider it my official duty, as official bacteriologist to your honorable body, to present certain facts in connection with the investigation into the cause of the deaths of William Murphy and Hon Ton, which will have some bearing on the negative value of the failure on the part of Dr. Mouser and myself, while working together to isolate a culture of virulent bacillus pestis from the tissues of these two men.

First. William Murphy died on the morning of August 11, and was autopsied by Dr. Taylor on that day. We obtained our tissues on the forenoon of the following day, but did not receive authorization to go ahead with the joint investigation until August 13, and only began work late in the afternoon of that day, or nearly sixty hours after death. Inasmuch as plague tissues decompose, and so become invaded with putrefactive organisms, with extreme rapidity, it soon becomes impossible to isolate the specific bacillus of plague. Colonies of the plague bacillus grow so slowly that they only appear as a visible growth in thirty hours, and a comparatively few saprophytic colonies will overrun a culture tube in twenty-four hours. Even if isolated, the products of the more rapidly-growing saprophytes may destroy their virulence.

Since the comparatively long time of sixty hours elapsed between William Murphy's death and the time we began work, our failure to isolate a culture of the bacillus, even if it had been present, would not be at all remarkable.

Second. The clinical history of William Murphy's illness corresponded with that of plague, and the death certificate was signed by Professor Moffitt, "Bubonic Plague." I append a copy of hospital records of the case.

Third. The pathogenic changes found at the autopsy corresponded with those seen in plague cases, the most important being enlarged, inflamed, and hemorrhagic inguinal glands, enlarged, pulpy spleen, and hemorrhages into pancreas, peritoneum, and mucous membrane of the intestines. The tissues were crowded with large numbers of bipolar bacilli that decolorized when treated by Gram's method of staining. Plague is the only disease in man in which this condition is seen.

Fourth. Guinea-pigs inoculated with tissue five days old (some delay being due to inability on my part to obtain guinea-pigs and refusal of Dr. Mouser to allow his to be treated with tissue) died with what I consider typical experimental plague, i. e., with lesions found only in animals inoculated with plague tissue or pure culture of plague bacilli. They died in five or six days, certainly too late for sapremia. (By lesions I mean macroscopic and microscopic appearances of tissues, including morphology and distribution of bacteria present.)

Unfortunately a sufficiently large number of rapidly-growing saprophytes were present to almost overrun the tubes prepared. The culture of an organism resembling bacillus pestis was isolated from the tissues of the dead guinea-pig, but it did not affect fresh guinea-pigs. Since the bacillus pestis rapidly loses its virulence, especially in presence of saprophytes, it is possible that this organism may have been an attenuated plague bacillus.

Fifth. In the laboratory of the Oakland Board of Health, working with Dr. Archibald, former bacteriologist to said board, and beginning investigation immediately after our autopsy on Sunday, we were enabled to isolate a bacillus identical in its morphological, cultural, and pathogenic characteristics with bacillus pestis. Although this work was started thirty hours before that in Dr. Mouser's laboratory, our plates were almost ruined by large numbers of proteus and other putrefactive organisms, and it was with difficulty that we obtained a culture.

Sixth. In tubes prepared by Dr. Taylor at time of his autopsy on Saturday, or forty-eight hours before commencement of work in Dr. Mouser's laboratory, and turned over to me as the university bacteriologist, there was present an almost pure culture of plague bacillus, two or three colonies of colon and proteus only being present. In the case of Hon Ton the body was decomposed at the time of autopsy, but in the submaxillary glands large numbers of bipolar bacilli, decolorizing by Gram's method, could be seen.

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In neither Dr. Mouser's laboratory nor in that of the Oakland Board of Health could we isolate the plague bacillus directly from tissues. Two guinea-pigs inoculated with tissue in Dr. Mouser's laboratory died, showing the lesions peculiar to experimental plague; and again, an organism was isolated similar in growth and morphology to bacillus pestis. Two guinea-pigs were inoculated, and in six days one of them died. I was not notified by Dr. Mouser of its death (he stated that he did not have my address), and he performed the autopsy, and stated that it did not die of plague. However, no microscopic preparations were made of the tissues, nor were they preserved in alcohol or other fixative for my inspection. When I did see them, after two days' exposure to the open air, they were in such an advanced stage of decomposition that I could form no opinion. Cultures prepared by Dr. Mouser showed large numbers of saprophytes. The other guinea-pig did not die.

It will thus be seen that our assertion in our joint report, of the non-pathogenicity of cultures isolated, rests in part on Dr. Mouser's opinion that the abovementioned guinea-pig was not affected with the plague.

I also investigated this case in the laboratory of the Oakland Board of Health, working with Drs. Archibald and Medros. As stated above, we were unable to obtain the organism directly from the tissues; however, from guinea-pigs inoculated with tissues we isolated a bacillus culturally and morphologically identical with bacillus pestis, which in pure culture killed guinea-pigs in a few days. These, in turn, showed lesions of pest, and from their bodies the same organism was isolated.

The above statements are made to show that the failure of Dr. Mouser and myself to isolate a pure culture of the plague bacillus from the tissues of William Murphy and Hon Ton is of no negative value, especially when the positive evidence is taken into consideration.

Respectfully submitted,

(Signed) H. A. L. Ryfkogel,
Bacteriologist State Board of Health of California.

SOME GYNECOLOGICAL IMPRESSIONS RESIDUAL FROM THREE DECADES OF GENERAL PRACTICE.

By Wallace A. Briggs, M. D., Sacramento.

"He must be a born leader or misleader of men," remarks Lowell in his essay on Democracy, "or must be sent into the world unfurnished with that modulating and restraining balance-wheel which we call a sense of humor, who, in old age, has as strong a confidence in his opinions and in the necessity of bringing the universe into conformity with them as he had in youth. In a world the very condition of whose being is that it should be in perpetual flux, where all seems mirage, and the one abiding thing is the effort to distinguish realities from appearances, the elderly man must be indeed of a singularly tough and valid fiber who is certain that he has any clarified residuum of experience, any assured verdict of reflection, that deserves to be called an opinion, or who, even if he had, feels that he is justified in holding mankind by the button while he is expounding it."

Notwithstanding the poet's playful admonition, we may well remember that were we, in any science or in any art, to await the final opinion, perfect in fact and form, silence universal and primeval would reign forever. Emboldened, then, by the reflection that the confusion of tongues, even in medicine, is by no means the greatest disaster that could befall our society, and, mayhap, not less by a rash enthusiasm perchance abnormally surviving the human equinox, I shall invite you, to-day, not to "green fields and pastures new," but to some of the granaries of our reputed science, where the weevil so often and so nimbly plays us sad havoc.

It is my first impression that the specialist in gynecology is an evil,—sometimes necessary; an evil because the narrowness of the specialist and the superficiality of the general practician are too often but obverse or complementary expressions of the same vice; necessary because, notwithstanding a conscientious struggle to attain the ideal, the general practician, in the vast majority of cases, lacks and very likely always will lack the severe training and the large experience indispensable in dealing successfully with the major difficulties of pelvic surgery.

The prevention and early management of gynecological diseases usually fall to the lot of the family physician who may or may not operate, depending on his qualifications, but who must be prepared to exercise an efficient prophylaxis and to advise a timely intervention. Let the family physician then deepen his studies, and the specialist broaden his own, and specialism will be largely shorn of its evils.

It is my impression that the general practician is, in no small degree, responsible for the existence of the gynecologist. He is responsible because of his disregard of the developmental period. If I may trust a very positive impression not founded on actual statistical research, imperfect development of the female organs of generation, as evidenced by defective function in both the pregnant and non-pregnant state, is far more frequent than it was thirty years ago. This is the result of abnormal conditions, which are within the power and the province of the physician to correct. He is responsible because of his neglect, in labor and abortion, of well-established principles of asepsis. Without exaggeration it may be said, I think, that not one physician in ten enforces these principles in the puerperal state. He is responsible also because he too often neglects the traumatisms and milder infections of the puerperal period. Reputable physicians not infrequently aver that lacerations never occur in their practise. Within the past two years I have repaired two lacerations of the perineum, extending well up the rectum, whose existence was denied by the physicians in charge of the preceding labor. The physician is responsible also because he fails to exert his influence in the promotion of sexual morality. That gonorrhea is one of the most important causes of the surgical diseases of women is unquestionable, and yet how generally does our profession treat illicit intercourse as a venial error? Lastly, he is responsible because he fails to use the full weight of his influence in the suppression of criminal abortion, whether perpetrated by "regulars" or by "irregulars."

Seventy-five per cent of the serious diseases of women can be prevented by the intelligent and conscientious application of the knowledge we now possess. How may the physician contribute to this result?—

1. By promulgating and, as far as possible, enforcing the hygiene of the developmental period,—an out-of-door life; cleanliness, fresh air, and sunshine within doors; rational diet and clothing, and the timely recognition and treatment of abnormal tendencies; and lastly, the judicious supervision of school life, including the curriculum.

2. By insisting, as far as possible, on

the employment in labor and lying-in of competent, trained obstetric nurses.

3. By the strict enforcement of asepsis in labor and lying-in. This includes the same precautions in the preparation of the patient and her surroundings, and in the conduct of labor and lying-in, as should be taken in the corresponding details of an abdominal operation. Without in the least undervaluing other precautions, there are two or three to which I desire to call especial attention.

In the first place, rubber gloves are absolutely indispensable in the practise of obstetrics, at least by the general practician. On this point I desire to speak emphatically and positively. *Aseptic obstetrics in general practise are certainly impracticable without rubber gloves.* On the score of economy, I have used, in a few cases during the past three years, the lightest kitchen gloves obtainable. They diminish tactile sensibility somewhat more than surgical gloves, but ordinarily they permit easy recognition of the sutures and fontanelles. They are more easily put on and off than surgical gloves, and are far more durable.

In the second place, digital examination per vaginam, whether with or without gloves, should be as infrequent as conditions permit. In three cases out of four I am content with the information derived from external palpation and auscultation. I am convinced this has been in the interest of my patients.

Lastly, the possibility of infection by the colon bacillus is not sufficiently apprehended by physicians generally. Frequently women in labor immerse themselves, as it were, in a feather bed or inferior spring mattress, and, in their uneasy movements, infect the genitals from the bedding soiled with fecal matter even before the arrival of the physician. The fetal head, advancing and receding with pain and interval respectively, carries the colon bacillus into the vagina, and not impossibly even into the uterus. Observation convinces me that this is often the mechanism of puerperal infection, assisted occasionally by the index finger of the obstetrician. A firm bed, careful local disinfection, and the utmost cleanliness are necessary to obviate this danger.

4. By immediate repair, under the strictest precautions, of lacerations of the genital tract. I can see no reason why lacerations of the cervix should form an exception to the rule. Undoubtedly, like every other innovation, this will meet the inertia of professional opinion and practise, but, with improved technic, it will be as firmly established as immediate repair of the perineum, allowing, of course, for the natural tendency of mankind to ignore unpleasant things which do not positively thrust themselves on the attention.

5. By immediate and thorough treatment of puerperal infection, whether early or late, mild or severe. In communication to the OCCIDENTAL MEDICAL TIMES and the *American Gynecological and Obstetrical Journal,* I have described a method of abortive treatment which has proved extremely efficient. These cases should be followed up vigorously in the early period, and not be permitted to drift on into the hands of the gynecologist.

6. By the promotion of sexual morality. Too often encouraged by physicians, the impression prevails among young men that continence is incompatible with sexual health. Whatever view he may adopt in this regard, no intelligent physician can for a moment doubt that the evils of incontinence, both individual and social, are a thousand-fold greater than those of continence. Whoever has stood by the bedside of a young, innocent, and trusting wife, dying of

gonorrheal peritonitis, or has witnessed the loathsome ravages of syphilis, either hereditary or innocently acquired, must needs be ethically moribund not to exert his influence in the suppression of sexual vice.

7. By the discouragement of infanticide in utero. It is my impression that the envisegement of salpingitis as an exclusively surgical disease is by no means free from objection. The surgeon who would stand aghast at the suggestion of sacrificing the testicle for a gonorrheal epidymitis, removes the gonorrheal tube in perfectly cold blood. Of course, this parallel is not perfect; no parallels are, except in imagination; but a not inconsiderable experience convinces me that the latter disease, uncomplicated, in the early stages, may be cured in the majority of cases without recourse to surgery. Observe I say in the early stages of a majority of uncomplicated cases. Were I to say in practically all uncomplicated cases, I should be unconscious of exaggeration. Every case of gonorrhea in women should be treated vigorously from the very beginning, in order to prevent extension to the uterus and tubes, both of the gonorrheal and of any secondary infection.

The patient should be put to bed, the vulva cleansed, the urethra and vagina irrigated with potassium permanganate solution (1:4000 to 1:2000), and a 10 per cent protargol glycerin tampon placed against the cervix and another just in the vaginal orifice, covering the mouths of the urethra and Bartholin's glands. The latter tampon should be removed before each urination, and replaced by a fresh one immediately after. The douche and cervical tampon should be repeated three times a day. If infection has already reached the tubes, the same treatment should be instituted, with the addition of saline laxatives and the ice coil to the lower abdomen. The saline laxatives should be continued until the acute symptoms have subsided and the likelihood of general peritonitis is past, rest in bed until convalescence is firmly established, generally from four to eight weeks, and the douches and tampons until the disease is eradicated. At the first intimation of peritonitis give a saline laxative, apply the ice coil to the abdomen, and stop feeding by the mouth entirely; nourish by the colon, carefully washing out thoroughly once a day. Continue this treatment until convalescence is established,—usually from twelve to twenty-four days. Begin with stomach feeding, tentatively, and suspend it at once if not well borne.

Within the last eight years I have pursued this plan of treatment in four cases of general gonorrheal peritonitis, two of them having stercoraceous vomiting (one of them on coming under my charge), and all recovering completely. One of them has since borne a child.

It is my impression that, under the influence of aggressive and triumphant abdominal surgery, the vaginal vault, as an approach to pelvic disease, has fallen into unmerited disfavor. As one of those who, in suitable cases, have steadfastly adhered to the latter during all its vicissitudes, and yet have no superstitious dread of the abdominal peritoneum, I have some opinions sufficiently grounded in experience to warrant their expression. Comparing abdominal with vaginal approach to the pelvis, these impressions are:—

1. No physician who has had sufficient experience with both of these methods will abandon either one. Each has its field,—not always clearly defined, but usually determinable.

2. In pelvic disease vaginal is preferable to abdominal approach: (*a*) In puerperal infections and acute infections

generally (in the early stages of these troubles drainage is often all that should be attempted, and the cases in which this should be premeditated by the abdomen are of extreme rarity); (*b*) in acute pyosalpinx, single or double; (*c*) in suppurative pelvic peritonitis and cellulitis; (*d*) in infected pelvic hematocele; (*e*) in old pelvic hematocele with delayed absorption; (*f*) in selected cases of misplaced pregnancy, either before or after rupture or abortion; (*g*) in small fibroids demanding hysterectomy; and (*h*) in incipient cancer of the uterus.

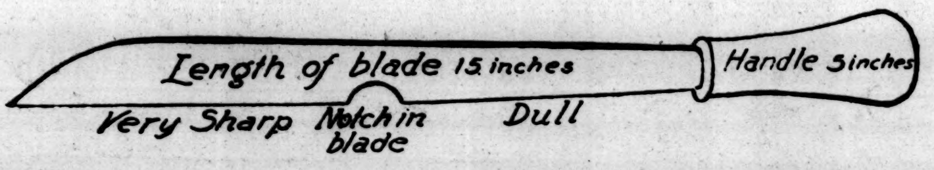
It is my impression that the desuetude into which the solid silver nitrate has fallen in the treatment of cervical catarrh and abrasion is not by any means innocuous. For a time, in obedience to authoritative professional opinion, I abandoned the solid stick for other and less efficient means, but soon returned to it, and, as the result of considerable experience, believe that the general prejudice against it is unfounded. In ordinary abrasions, due to slight or moderate laceration and cervical catarrh, the solid nitrate (in senile abrasions conjoined with acid nitrate of mercury solution) is one of the most efficient remedies—not, of course, to the exclusion of curettement in proper cases. The organic silver salts may possibly do as well as the stick nitrate, but the latter, in contact with the secretions, is immediately decomposed, and forms an organic salt in more intimate contact with the diseased tissues than it could possibly be brought by any other means.

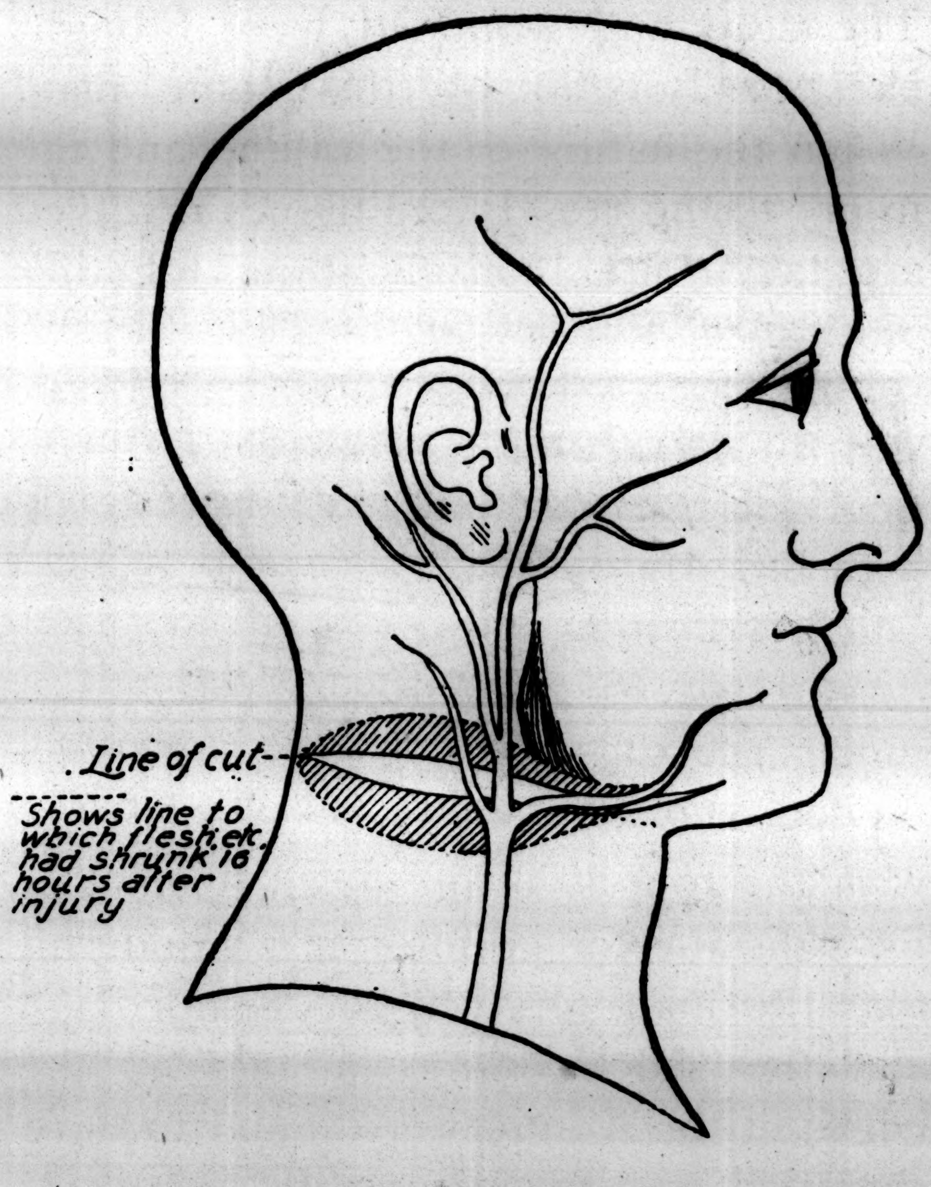
It is my impression that, in the diagnosis and treatment of diseases of the urethra and bladder in women, the endoscope is too often ignored. Without it differential diagnosis and rational treatment in these diseases are impossible. Kelly's recent modification of his original instrument is based on scientific principles, and leaves little to be desired.

It is my impression that misplaced pregnancy is frequently unrecognized in general practise. In the past twenty-two years I have seen eighteen cases of this anomaly, nine in my personal work and nine in consultation. As all but two of these (one each in my personal and my consultation work) occurred in the latter half of this period, it would not be unnatural to infer that several had been overlooked in my earlier experience. Disregarding this indefinite number of presumptive cases, however, there still stand accredited to me personally nine cases of misplaced pregnancy, constituting, as I reported to the Sacramento Society for Medical Improvement, a ratio of not less than 1:250 of my obstetric cases. This is about double the ratio ordinarily given, which, without ascribing great importance to a limited and individual experience, I am yet inclined to believe is below the mark. I am of this opinion for several reasons: 1. The recognized cases of ectopic pregnancy in my own obstetric practise have exceeded a ratio of 1:250, which I suspect would be materially increased by the unrecognized cases of the earlier, and possibly even of the later, period. 2. The recognized cases seen in my personal and consultation work in the city of Sacramento constitute an estimated ratio of misplaced to normal pregnancy of not less than 1:750 for the entire city. It is far from probable that, during a period of twenty-two years, any one physician has seen two-thirds of all the cases of ectopic gestation occurring in a city of an average population of 22,000 or 23,000. 3. All of the cases of misplaced pregnancy recognized during this period in the city of Sacramento, as far as I have been able to learn, have occurred in the practise of four or five physicians. It is highly improbable that the twenty or twenty-five others in equally active practise have on the average escaped the normal ratio of these cases. 4. Until quite recently physicians generally have regarded tubal rupture, with its classical features of sudden excruciating pelvic pain followed by exsanguination and collapse, as the logical and necessary outcome of tubal pregnancy. With such views they could not escape ignoring a large ratio of cases.

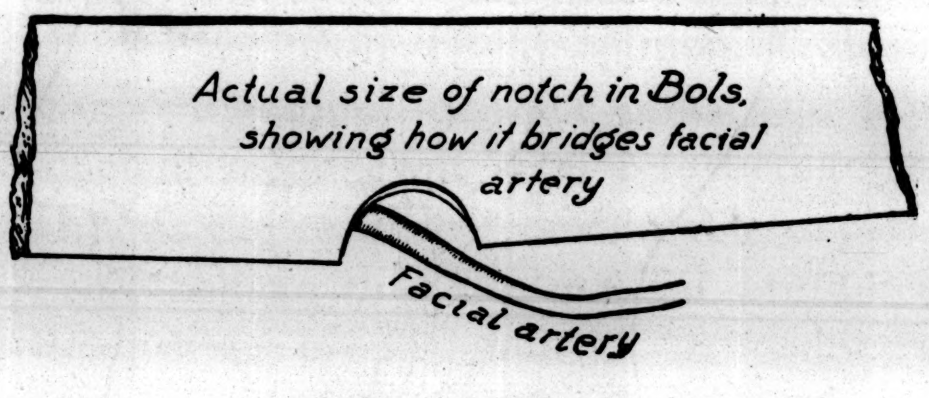
INCISED WOUND OF THE MUSCLES, OF THE OCCIPITAL AND EXTERNAL CAROTID ARTERIES, AND EXTERNAL JUGULAR VEIN — RECOVERY.

By F. G. Walters, M. D., Late Assistant Surgeon, U. S. V.




Line of cut
Shows line to which flesh etc. had shrunk 16 hours after injury

Case of Private John Greathouse, Company H, 23d Infantry, wounded near Bongao, Philippine Islands, Sulu Archipelago. On January 26, 1900, Sergeant E. de Wolfe, Corporal McGatt, Privates Carter, Gibbons, and Greathouse left Bongao for Tawi Tawi Island on a hunting pass. On January 2 the party was surprised by a number of hostile Moros, armed with barongs or bolos. At the time of the attack McGatt was bathing in a creek some distance away, and thus escaped harm. The Moros stole upon the others, who were playing cards, from the rear. Sergeant de Wolfe was instantly killed, being almost decapitated at a blow. Private Gibbons died shortly afterwards from his wounds, Carter was wounded in the back, and Greathouse, the subject of this report, received a dangerous cut in the neck. The injury was an incised wound of the severest type, so severe, in fact, that his recovery therefrom is little short of marvelous. It extended along the right side of the neck, from a point immediately over the axis, to a point half an inch from the mental process. The extent and gravity of this wound may be deduced from the following data: It was seven inches in length by four inches in width; it divided completely the trapezius on that side, sterno-cleido mastoid, platysma at its lower margin, and masseter, muscles, partially, etc., severed the occipital and external carotid arteries and external jugular vein, laying bare the axis and internal carotid artery, which vessel only escaped injury by the smallest fraction of an inch. The facial artery remained uninjured, owing to a defect in the blade of the barong. It will be seen, on examining the sketch of the barong, that its edge presents a large notch, a little more than half way from the point to the handle, in the dullest portion of the blade. The blow must have been a backhanded one, delivered from the right and to the rear of the victim. This brought the notch opposite the facial artery, over which it formed a bridge on the ramus of the jaw. It tore out a piece of flesh three and a half by one-half inches from the neck. On infliction of the wound, the man's head was drawn over onto his left shoulder by the traction of the muscles on that side. In this condition he remained for sixteen hours before he was seen by a surgeon. The only treatment he received was at the hands of Corporal McGatt, the unwounded man. The treatment consisted merely in tying a handkerchief soaked in sea water over the gaping wound. The dead and wounded were brought back to Bongao by this same man. When the nature of the wound and the injury to the vessels and tissues involved are taken into consideration, together with the rough voyage in an open boat for a distance of 34 miles, it is wonderful that the man survived the hemorrhage and the shock. On examination, the edges of the wound were found to have shriveled and turned inwards, due, no doubt, to the astringent action of the sea water, which is very marked in these parts. The external carotid had retracted within its sheath and was still bleeding, an almost imperceptible jet; the ramus of the jaw was found to be fractured from the impact of the barong, and several spiculae of bone were removed. The wound was packed with antiseptic gauze, drainage inserted, and the edges brought into apposition by eleven stitches. In twenty-four hours examination showed that, owing to the long previous exposure, asepsis could not be obtained. Several sutures had torn loose, owing to degeneration of the surrounding tissues. It was decided to abandon the effort to secure union by first intention and let the wound heal by granulation. This it did, with proper attention, in seven weeks. It is considered that this course had a more beneficial result, for this reason, had the wound healed as at first sutured, the result would have been to draw the head to one side in permanent deformity, resembling a bad case of torticollis. Healing by granulation has insured the patient's head in a perpendicular position upon his shoulders, though he will hereafter be disfigured by a wide cicatrix of the neck, deeply indented at the nape. The recovery of a subject from a wound of this severity has seldom, perhaps never, been paralleled. The patient is in the best of health and physical condition at the present time, and is apparently none the worse for his experience, beyond the loss of lateral and rotary motion of the head upon the axis, which will partially return in time. Temperature: January 27, 103; 28, 103.2; 29, 100; 30, 99; 31, 97.5; February 1, 98. Normal since then.


Actual size of notch in Bols, showing how it bridges facial artery
Facial artery

Reduced One-third.

FOUR CASES OF EXTRA-UTERINE PREGNANCY TREATED BY THE VAGINAL ROUTE.

By Frank L. Adams, Oakland, California.

Read before the Medical Society of the State of California, April, 1901.

Definition.—When the impregnated ovum is developed in any other location than the uterine cavity, it is called extra-uterine pregnancy or ectopic gestation.

The principal varieties of extra-uterine pregnancy are: 1. Tubal or Fallopian. 2. Interstitial. 3. Ovarian. 4. Abdominal. The ovarian and abdominal forms have been disputed by some of the best authorities, but rare cases of the ovarian have been demonstrated by Leopold, Patenko, and Martin. Schlectendahl reported a case of abdominal pregnancy, the rarest of all, and one that could not be explained by any other hypothesis. The interstitial is evidently a modification of the tubal, as the pregnancy takes place in that part of the tube which traverses the uterine wall. Hence Dudley concludes that for practical consideration the tubal is the only form of ectopic gestation. The interstitial and tubal are primary forms of extra-uterine pregnancy, that is, the fertilized ovum develops where it is first arrested. When a rupture takes place, or there is a change of position by reason of development, it is called a secondary form. According to Kelly, the interstitial may become secondarily: 1. Intrauterine. 2. Abdominal (fœtus dies). 3. Intraligamentary (fœtus dies). In a similar manner the tubal may become: 1. Mole (fœtus dies). 2. Abortion (fœtus dies). 3. Tubo-abdominal. 4. Tubo-ovarian. 5. Abdominal. 6. Intraligamentary (fœtus dies).

Location.—In a large number of cases it is found that there is an equal liability of occurrence of the condition on the right and left sides.

Frequency.—It was formerly considered that tubal pregnancy was a very rare condition, but at present it is not so held. Formad reported that in making 3,500 general autopsies he found thirty-five cases, or one per cent. This is the highest percentage yet reported, and proves that the condition is not so uncommon as was formerly believed.

Pelvic hæmatocele, which was recognized and described by the older investigators, is not of uncommon occurrence, and it is now maintained by the best writers that in nearly every instance this condition is the result of ectopic pregnancy.

Tubal pregnancy may occur on both sides at the same time, or there may be a twin pregnancy in the same tube. Extra and intra-uterine pregnancy may occur simultaneously, or a recurrence of extra-uterine pregnancy may happen to the same individual. Tubal pregnancy has occurred after removal of the uterus through the opening left in the vagina.

The Causes of Tubal Pregnancy.—Some of the best authorities believe that the true cause of this condition is obscure or unknown; others, however, equally worthy of consideration, give the following as probable reasons for ectopic gestation: Catarrhal or purulent salpingitis; perisalpingitis, producing adhesions of ovaries and tubes; reversed or impaired peristalsis; destruction of the cilia; accessory tubes; imperfect development of the tubes; great length and tortuosity of the tubes; hernia or diverticula of the tubes; thickening of the tubes; dilations, constrictions, flexions, and torsions of the tubes; mucous polypi within the tubes; fibroids, or other tumors producing pressure on the tubes; persistence of a fetal type of uterine tube. It seems perfectly logical to suppose that the causes just mentioned would be active in preventing the downward passage of the ovum, whether impregnated or not, to the uterus, and thus produce either sterility or ectopic gestation.

Time of Rupture.—Early rupture is the rule in tubal pregnancy, but it may occur at any period. Rupture is not very usual at the first month, while the majority of cases, according to statistics, rupture in the second month. It is of frequent occurrence in the third month, comparatively rare in the fourth, and very rare in the fifth month.

Cause of Rupture.—The cause of rupture may be due to: 1. Tension of the tubal walls. 2. Hemorrhage between the ovum and sac. 3. Mechanical causes, such as falling, jumping, digital examination, laughing, coughing, or vomiting.

Symptoms and Diagnosis of Tubal Pregnancy.—1. No certain means in the early period. The patient may be utterly unaware of her condition until the occurrence of rupture. (Dudley.) 2. Frequently cases of extra-uterine pregnancy give a history of previous sterility and regular menstrual periods with a sudden cessation. 3. The usual signs of pregnancy, such as cessation of menstruation, nausea, and changes in the breast. (Kelly.) 4. Slight or even severe hemorrhages from the uterus, coming continuously or at intervals. (Dudley.) 5. Colicky pains, probably due to tubal or uterine contractions, and signs of peritonitis. (Dudley.) 6. Sudden and severe pains, which are often described as tearing in character. 7. Disorders of micturition and defecation. (Pozzi.) 8. Pelvic pain and the presence of a tumor distinct from the uterus and sensitive upon pressure. (Kelly.) 9. Decidua cast off from the uterus, and the presence of a growing tumor. (Routh.) 10. Any irregularity of the menstruations, and the presence of a mass at the side or behind the uterus. (American Text-Book.)

Mortality.—The mortality in extra-uterine pregnancy when the plan of non-interference is followed is very high. Schauta says 68.8 per cent in 241 cases, and Martin 63.1 per cent in 265 cases. With interference Martin found a death rate of 23.3 per cent in 515 cases. Kelly, however, believes that in the hands of good operators the rate should not exceed 5 or 6 per cent. In cases where there is sepsis and peritonitis, the death rate would probably closely approach the figures given by Martin. Under the proper conditions the surgeon can reduce the mortality to one-tenth of that following the expectant or medical plan of treatment. When such a condition is suspected, a complete history of the case should be taken, and a most careful bimanual examination made. If the patient is unduly sensitive, the investigation should be made with an anesthetic. When rupture has taken place, the diagnosis is usually less difficult, as there are the usual signs of hemorrhage attended with pain of greater or less severity.

Treatment.—The treatment of this condition is, for obvious reasons, surgical as soon as the diagnosis is made. In the great majority of cases the abdominal route is the best, especially when internal hemorrhage is suspected. When, however, there is a well-defined and immovable mass felt through the vaginal vault, vaginal section and drainage are clearly indicated. In properly-selected cases the vaginal method is better, safer, and more rapid than the abdominal. This is especially true when we are dealing with an adherent sac, accompanied with suppuration or an active peritonitis. The tubes and ovaries are preserved, the abdominal cavity is not usually opened, and the intestinal adhesions are avoided. The shock is much less marked as the anesthesia is much shorter, and the handling of the bowels unnecessary. On the other hand, there is danger of wounding the rectum and the intestines, when adhesions are present, but with care this can be avoided. Rarely the wall may perforate through suppuration, and infection of the peritoneum result. Occasionally the hemorrhage is severe and can not be controlled. In such a case the abdomen must be opened and the vessels tied.

Case 1.—Age thirty-two years, married six years, no children, no miscarriages, menstrual periods always regular and without pain. Health has been excellent. Menstruation appeared in June, 1900, as usual, but was absent in July and August. August 25 she had indefinite but not severe pains in the right side bordering on the right umbilical region and intermittent in character, but the abdomen was not tender to the touch. Bowels constipated, and necessary to resort to enemas in order to properly move them. Patient had been confined to bed for three weeks when she was admitted to the hospital on the 16th of September. A few days before her admission to the hospital I saw her in consultation with Dr. Akerly, and found the patient suffering with signs of sepsis. High temperature, sweating, and a marked tenderness over the entire abdomen. Upon vaginal examination a large mass posterior to the uterus was easily found. The evidences of extra-uterine pregnancy were, absence of menstruation, intermittent pains, and distress in the epigastrium when the menstruation did not appear. Diagnosis, pelvic abscess and tubal pregnancy. Patient admitted to the hospital September 16, 8 P. M. Pulse 100, and temperature 102$\frac{2}{5}$. She was operated upon the next morning at ten o'clock. A large incision was made posterior to the uterus, and the sac was opened; a considerable quantity of greenish amniotic fluid came away, and with some difficulty a tissue resembling placenta was removed, and this was attended with considerable hemorrhage, which was controlled by packing and a pad placed over the abdomen. No fetus and no cord were found. The patient had a long and slow convalescence, attended with much suppuration, and left the hospital in good condition after ten weeks. At the present writing she is in the best of health, and the pelvic organs appear to be normal in every way.

Case 2.—Age thirty-three years, married sixteen years, seven children, six living and in good health; one child died at six months from convulsions; no miscarriages; labors easy. During September she consulted me on account of bronchitis, slight fever, and occasional sweats. Tuberculosis suspected, but no bacilli found in the sputum. Following my advice, she went to the country and returned much improved but still an invalid. November 8 I was called, and found patient in bed and flowing freely. Patient had not missed her period, and on that account did not believe herself pregnant. A vaginal examination revealed nothing of interest. No pains, and the uterus not enlarged. November 22 she had very severe pain, and felt weak and faint. November 23 severe pains in chest and abdomen, and extreme weakness; pulse weak. The patient gradually improved, but there was a slight and constant hemorrhage from the uterus. December 18 quite a large mass was discovered posterior to the uterus and to the left. Patient removed to the hospital December 20. Operated upon December 22 at 8 A. M. Diagnosis, extra-uterine pregnancy. By an incision posterior to the uterus a sac of considerable size was opened; some fluid and clotted blood removed. Placental tissue torn away with the fingers. No cord and no fetus found, and sac packed with gauze. Patient left hospital in twenty-six days in good condition. At present time the patient is in fair health, but has laceration of uterus and perineum, which I did not deem it advisable to repair at the first operation. Pelvic organs in good condition. The signs of extra-uterine pregnancy in this case were a constant flowing of blood, abdominal pains, weakness, and rapid pulse, and the presence of a mass which increased in size. No other evidences of pregnancy and no changes in the breasts. At first it was thought to be an ordinary one of miscarriage, but later on the diagnosis was evident.

Case 3.—This is one of Dr. Crowley's, and the history has been kindly given by him for this paper. Age twenty-nine, married ten years, no children. Menstruation always regular but very profuse when a girl, but not so much since she has been married. Six months after her marriage she became pregnant, and when in this condition three months, took abortive pills which brought on the flow. She was ill in bed for one week, and made a rapid recovery. She missed her next period, and at the end of six weeks went to a professional abortionist, who, after causing her much pain, brought on a slight flowing of blood. In a few days she returned to his office for another treatment; on this occasion she fainted before reaching home, and was confined to her bed six weeks with sepsis. For the last three years she has been very tired when walking or standing, and has suffered with a bloody mucous discharge. Her last menstruation appeared November 17, and continued for three days. She missed her next period; the breasts became swollen, and there were abdominal pains. March 1 the patient called Dr. Crowley, who found signs of sepsis and a large mass posterior to the uterus. An immediate operation was advised, and, after some hesitation, the patient was removed to the hospital March 14, and on March 16 an operation was performed. Diagnosis, sepsis and extra-uterine pregnancy. The usual incision was made, and a considerable quantity of amniotic fluid came away. A large placental mass was removed with much difficulty, and this was attended by severe hemorrhage. The sac was thoroughly packed with gauze, and a compress placed over the abdomen. Since then the patient has been most dangerously ill with sepsis, and irrigations for a time were used every four hours. She is now convalescent, and will, in all probability, make a good recovery.

Case 4.—Age thirty years, married three years, health good, no children, no miscarriages. First menstruated at sixteen years, and always regular, continuing for four days. Menstruation so slight in amount, however, that she often resorts to tonics. Six years ago the patient was injured by a fall from a carriage, and had a pelvic abscess which was opened per vaginam. She has pain in left ovary two days before menstruation, and is not able to stand during this period. Has had some leucorrhea, which was relieved by astringent douches. March 1 I was called to see the patient, who had passed her period six days, and, thinking she was pregnant, had taken abortive medicines. There had been slight flowing, chills, high fever, temperature 103.8°, and the entire abdomen was tender and tympanitic. Pulse 130, and severe pain. Upon digital examination the uterus was found to be extremely sensitive, and more pain on the left side than the right. Diagnosis, retained decidua, sepsis, and general peritonitis. The patient was removed to the hospital, and taken to the operating room after a careful preparation. When under the anesthetic, the uterus was found to be normal in size, and a small tumor was discovered in the region of the left tube. I still believed I had a case of retained secundines. but failed to find any evidence of their presence after a thorough curettment. The uterus was irrigated and packed with gauze. Then an incision was made posterior to the uterus and the adnexa examined. A mass double the size of a large English walnut was found in the left tube, and this was brought down with a pair of forceps and ligated. The wound was packed with sterile gauze, and the patient carried to her room. The packing was allowed to remain for forty-eight hours, and since then the wound has been irrigated and packed every day. The patient showed marked improvement at once, and is convalescent. Through an oversight the specimen was thrown out, but there was no doubt in the minds of those present that the case was one of tubal pregnancy. The cause of the high temperature and general peritonitis I can not explain, as there was no rupture and no hemorrhage.

TOPICAL TREATMENT IN GYNECOLOGY.

By George Wm. Davis, M. D., San Francisco, Cal.

Read before the Medical Society of the State of California, April 16-18, 1901.

To select a subject for discussion before an association composed of men and women of diversified experiences, and that may be of interest and practical benefit to most of its members, is conceded, by many of even the learned, to be a task of no small magnitude. However, I undertake to make the attempt. What I have to say will be brief, and, I trust, to at least a small degree, practical.

The rapid and prodigious development of gynecology in the two or three decades just past, has given to the profession many efficient measures for the relief and cure of nearly all the diseases of the female pelvic organs. In this marvelous progress there has been witnessed, also, a large number of unfortunate errors and extremes in practice. But, with so many earnest and intelligent workers seeking the truth, time will, very soon I trust, settle most of the vexed questions, and ultimately secure a more universal adoption of safer lines of treatment. After my graduation I entered the broad field of the general practitioner. I knew but little about the practice of gynecology. I am glad that the medical graduate of to-day leaves his or her alma mater far better equipped for professional responsibility in every department of medical and surgical practice.

The term gynecology was not so familiarly known then as it was a few years later, when the practice had nearly reached the summit of popularity. Almost every woman that came under professional care during this period, was informed that nearly all the aches of which she complained were due to a reflex action, of which the reproductive organs were the unfailing source. Doubtless, many of us know of instances, in at least our earlier practice, of a woman seeking help of this and that physician, by whom every known local means in gynecological practice had been tried, without obtaining relief from, especially, her headaches. In despair she was induced to consult an oculist, he finding that the headaches were the result of errors of refraction, and when the proper glasses were fitted, the head pains very soon disappeared.

After a practice of eight or nine years, I went to New York and Philadelphia for almost a year, and later to the medical centers of Europe for many months, not so much to become a specialist, but for the purpose of making myself competent to work more successfully in the gynecological field. My instructors were eminent teachers and writers in this specialty. As I look back over this and a few succeeding years of my professional life, I have much to criticize, not the noble and cultured men, but the means that were almost universally employed. The routine treatment then —as I fear it is in most particulars too much so now—was the application of nitrate of silver, fuming nitric acid, tincture of iodin, either alone or combined with carbolic acid, and glycerin applied with dressing forceps or an applicator, wrapped with cotton. For correcting displacements, a large collection of all kinds of pessaries were at hand. As our science progressed, the tampon of cotton, and, later, of lamb's wool, saturated with glycerin or boroglyceride, electricity, and, finally, vaginal douches of hot water by the gallon about completed the list. The office treatment of female patients for imaginary or real diseases of the generative organs, was so universally practiced in this and in foreign countries that comparatively few women escaped some form of treatment through the speculum. As Joseph Price has forcibly, if not elegantly stated, there has been too much "gynecological tinkering." I am not pessimistic, and do not undervalue the benefit derived from topical treatment. While in many cases the routine treatment has done good, nevertheless, I think that it has been much abused, and has done a deal of harm. I am well aware that this is not a popular chord to strike, to even mildly criticize the indiscriminate office treatment of female patients, because this class of work is the source of considerable revenue to a large number of our profession. I regard it as our duty to tell frankly our diagnosis, when we are reasonably sure of it, to our patients, what the treatment is intended to accomplish, and the probable length of time required to obtain the desired results. This frankness will, sometimes, send the patient to other physicians, but this should not swerve us from doing what we know to be right and honest. We have survived through the cervical catarrh and ulcerative period. These views largely dominated our pathology, and, therefore, our therapeutics, as did the humoralist doctrine of old.

After a brief period the popularity of these notions waned, and soon were largely abandoned; instead of the application of nitrate of silver and nitric acid, that frequently left a cicatricial stenosis, more rational and scientific methods have succeeded in the treatment of these affections. Nowhere is cleanliness more imperative than in every-day gynecological work, both for the protection of the patient and of the physician himself. Many patients have been infected by a failure to observe the proper precautions. After all that has been written in text-books and journals, too many physicians in both the city and country are faulty in this respect. A proper realization of the significance of, especially two terms, sepsis and asepsis, to practical gynecology, constitutes the very essence of successful scientific work. The pathology of Goupil and Burnitz did much to place the diseases of women on a practical and scientific basis, and rendered the means of treating pelvic affections, and their often fearful complications, in a manner more certain and expeditious. I am disposed to accept with them, and other distinguished pathologists, that a large majority of pelvic difficulties begin in the endometrium, extend by continuity of tissues to tubes, ovaries, and peritoneum.

There is another class of inflammatory pelvic troubles that are transmitted by the lymphatics of the entire uterus to the broad ligament, tubes, ovaries, and peritoneum. The existence of traumas are frequently the exciting focal points in these cases. In this form of inflammatory extension, we often find considerable exudates, or pus confined within a portion of the peritoneal cavity, leaving the tubes and ovaries free and comparatively healthy. An experience demonstrating this, I have had as a result of infection after labor, where, after a lapse of several weeks, a collection of pus was found, notwithstanding the careful local attention that was given, anterior to the uterus, the pus cavity having for its roof and sides the adherent omentum, while the tubes and ovaries were free from damage. This was the patient's third confinement. The labor was short and normal in every particular. An old laceration of the cervix existed, and I have no doubt that small, fresh injuries were made near the internal os through which infection took place.

Endometritis is a common affection, and is so easily influenced by environment or conditions of general health that very many women during their menstrual life suffer from it. In ordinary cases, tonics, good food, regular movements of the bowels, plenty of outdoor exercise, sexual rest, and applications of astringent tampons and injections, are usually sufficient to effect the desired result. I have found that from twenty to thirty per cent of alumnol and ten to fifteen per cent of ichthyol with boroglyceride, is an excellent astringent and anodyne application.

In the severer cases, and before the endometrium is subjected to local treatment, a careful preparation of the patient should be made. If the cervix is not dilated and patulous, an instrumental dilatation should be made so as to have free drainage, and, if required, a thorough curetting followed by packing the uterine cavity with aseptic gauze, and, subsequently, a free use of sterilized douches.

In the treatment of that frequently distressing affection, vaginismus, there has been but little advance since the days of Marion Sims. I have found a vigorous dilatation of the vulva under anesthesia, subsequent cleanliness, and the administration of bromides, to be the most satisfactory plan.

Women who are suffering from diseased tubes and ovaries, and who go to the physician's office several times weekly, are certainly objects of commiseration. Such patients would derive more benefit by resting at home in bed during the two or three hours required for making these visits. Such cases, except, possibly, exceedingly mild ones, receive but little relief, however skilfully applied, by way of application to the vaginal vault. The application of remedies to either cul-de-sac for diseases of the adnexa is about as scientific as it would be to bathe the abdomen with an antiseptic solution for the cure of cystitis. In hyperplasias or subinvolution of the uterus, proper applications are exceedingly useful, and can be made in the office. I have found the alternate use of the faradic and galvanic currents of decided aid in treatment.

Following the recent puerperium there always exist more or less relaxation and engorgement, which condition requires the faradic current more often, and the electrical treatment is usually sufficient. In the more chronic phase of this condition, when the slowly-organized connective tissue is taking the place of the uterine muscles, the galvanic current should be more freely applied than the faradic.

Mrs. M. B., aged twenty-seven. She had had two children and one miscarriage, the latter about five weeks before she applied for relief. She complained of pain in back and tenderness over a large portion of the abdomen. Uterine cavity measured about four inches. Uterine discharge rather profuse. At this office consultation the intra-uterine negative faradic current was given. A few days later she felt better. The cavity was smaller. After the eighth treatment it was reduced to about two and a half inches, and the abdomen no longer tender.

Menorrhagia often taxes to the utmost the resources of the gynecologist to ascertain the etiology and to control or arrest them. In these cases there is nearly always found very marked anemia and a uterine fiber relaxation, rather than an inflammatory condition of the mucous membrane. For relief and cure, the faradic current, tonics, topical astringent applications are among the most efficient. From several cases, I cite the following:—

Mrs. C. R., aged thirty-three. Three children, youngest, one year old. Applied at the beginning of fourth week of considerable bleeding. Menstruation had been regular, but profuse, and more or less painful, followed by leucorrhea. She was anemic and nervous. Uterus normal in position, but engorged; os, patulous. Forty milliamperes, positive pole, were applied to the cavity. On the second day she reported that the flow was lessened. On the fourth day the flow was much worse. She was then given a strong intra-uterine faradic current. This almost completely arrested the hemorrhage by the following day. After another and milder application, the treatment was discontinued. In six weeks she reported herself in good health.

Ovaralgia, or intermenstrual neuralgia, is an intermittent or a persistent pain in the pelvis. When unassociated with other evidences of diseases in the appendages, the pain is to be ascribed to a neuralgic affection of the nerve supply of the pelvic region. Unfortunately, the graver cases are not likely to be cured by any form of topical treatment. The less profound neuralgias (and these form the bulk of such cases) are, as a rule, promptly relieved by the introduction of anodyne suppositories, and either abdomino-lumbar or vagino-abdominal of either current, with the proper regulation of the bodily functions. I have no doubt that often a sub-acute ovaritis does exist, and yields to the treatment; I know of none better. The possibility of a neuralgia in the pelvis, due to disease of the spinal cord, should not be overlooked. Also reflex pain from hemorrhoids, anal fissure, and sometimes from a few of the bacillus coli communis. The affections of the urethra, carbuncles, pruritis vulva.

Obviously time does not permit of the presentation of but few of the important affections of the genitalia, and, lastly, uterine displacements, although a very important topic, I regret can receive only brief mention in this paper. The literature upon, especially the pathology and treatment of the malpositions of the uterus, and, I may properly include, the ovaries, is ponderous and, unfortunately, like unto most medical subjects, lamentably diversified. In spite of all that has been written concerning the abuse of the pessary, its use continues. The concensus of gynecological authority is "that the pessary must be restricted to those cases in which the displaced organs are reducible, in which the pessary is capable of holding them in place and can be worn without discomfort." The office, therefore, of the pessary is to maintain the replaced uterus in, or as near as possible, the normal position. Hence the necessity of having the displacement reduced before applying the instrument. Under no consideration would a competent physician apply a truss before a hernia was reduced, neither would a hernia be reduced by a truss, but the hernia is first reduced and the truss applied. The analogy holds good regarding the pessary and displacements. The quite too common office attempts at local treatment and correction of displacements, as a rule are not satisfactory—often a positive failure. Retroversion without enlargement, as we find in the unmarried, is very frequently difficult to treat. A large number, if not all the cases, of malpositions should be put to bed, adhesions broken up, uterus brought forward, cervix dilated, if not already so, lacerations repaired, uterus reduced, and a correctly-fitting pessary put in place. The importance of exercising care in placing a pessary is emphasized in the fact that the apparent vaginal space while the patient is on her back is not the actual size when she is standing; therefore a pessary which seems to be loose while the patient is recumbent becomes too snug as soon as she assumes the upright posture, because of the contraction of the pelvic muscles against the intra-abdominal pressure. While the pessary is in position the fingers should pass around with comparative ease. Many general practitioners of no special skill frequently get good results. This they do by putting the patient to bed, reducing, and placing one of the varieties of Smith or Hodge pessaries or a Thomas-Munde modification. I feel that I must repeat that, when the circumstances of the patient will permit, the rest treatment of fourteen days or more is the shortest, easiest, and most satisfactory way of obtaining, even in ordinary cases, creditable results. I do not believe that the pessary has been of the value that its strongest champions claim for it. This statement I make in face of the fact that I have had a fair degree of success in the use of it. Yet I have seen considerable damage done in my own practise, particularly of earlier years, and in that of other physicians.

The operations that have been devised for a more permanent and successful correction of displacements worthy of special mention are, ventro-fixation, ventro-suspension, vagino-fixation, and the Alexander operation. This latter is regarded as the most useful in all comparatively uncomplicated cases, and when the displacement is intractable to the employment of the pessary. It is indeed gratifying to note the increasing popularity of the round ligament operation for posterior displacement. I am impressed that few operative procedures, with no more than a minimum of danger, are capable of furnishing so much relief. The more or less rebellious cases should not be encouraged to wear pessaries, when, comparatively speaking, so simple an operation will give pretty uniformly good results. If intra-abdominal conditions are such as to prevent the extra-peritoneal operation, the abdominal section can be made, and the ligament shortened by some one of the intra-abdominal methods.

HOSPITAL REPORTS.

Gynecological Clinic, Cooper Medical College, Geo. B. Somers, M. D., in charge.

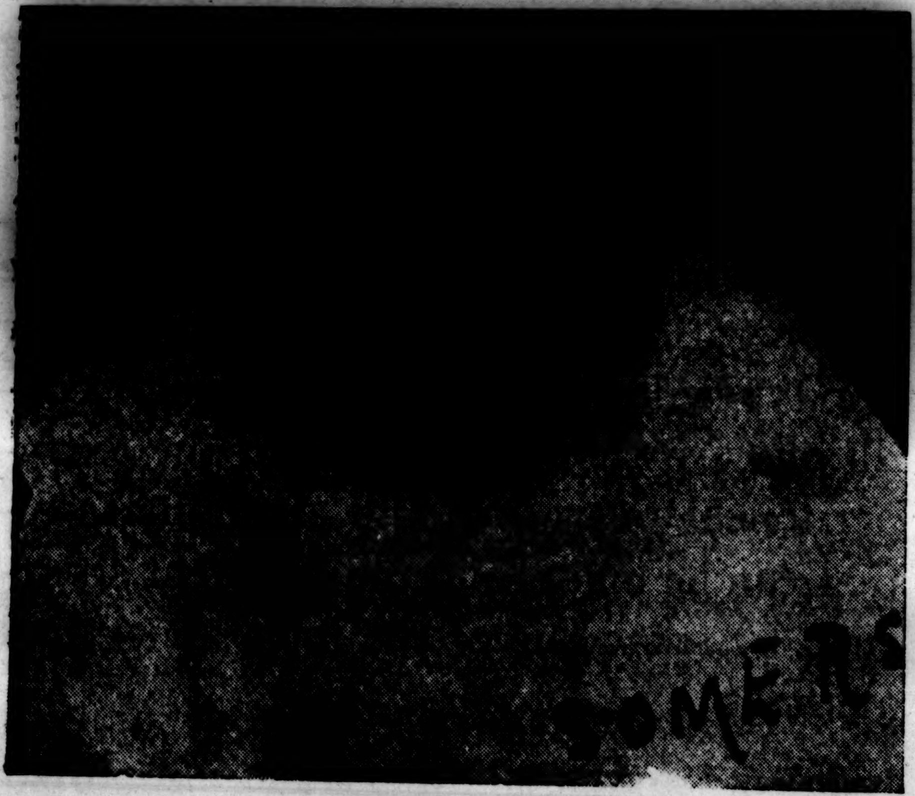
Reported by Minora E. Kibbe, M. D.

ECCHYMOTIC SPOTS AND PRUPITUS DUE TO PHENACETIN.

Case 3001. Mrs. S., age 50, German, menopause two years ago. During the course of treatment for prolapse of uterus, by means of a pessary, she complained of excessive nervousness and flushing, with pulse 120. Phenacetin was prescribed in powders No. VI, aa gr. v, every three hours. Patient took them that evening and the next morning. During the next day she complained much of itching of the skin over her abdomen and limbs, which was relieved by alcohol and salt water. When she returned to the clinic, on the fourth day, large ecchymotic areas were seen on the inner side of each thigh near the groin, and small ones were scattered over the abdomen and extensor surfaces of the limbs. These have gradually faded out. No other symptoms were noticed by the patient. In common with other coal-tar products, phenacetin may produce an erythema. Warfainger Sajous, 1889, A-122, observed a papular eruption lasting three days on thorax, abdomen, and arms. Muller, ibid, details two cases, in which very large doses, 6 to 8 grams (92 to 123 grains) daily, produced decided cyanosis, and an examination of the blood revealed the presence of methemoglobin.

PROLAPSE OF UTERUS.

Case 2990. Mrs. L., age 55, Irish, came for relief from prolapsed uterus. The accompanying illustration, taken in the knee-chest position, shows very clearly the direction of the tear in a case of complete laceration of the perineum. In the dorsal position the relaxation was evident, but the labia simply gaped, without showing the actual outlines of the introitus. When placed in the knee-chest position, the vagina balloons out with air, the vaginal walls recede, and the edges of the introitus become sharply outlined.



PREGNANCY AFTER OVARIOTOMY.

Mrs. H., aged 37, housewife, consulted regarding pain in left side. An examination showed the presence of a cyst about the size of an orange. She was much emaciated, coughed and expectorated a great deal, had night sweats, and presented considerable dulness over the upper portion of the left lung. As the cyst caused considerable discomfort, an operation was proposed and accepted. The cyst was removed April 28, she was up and walking May 20, and was discharged a few days later. She was seen again August 12, and found to be pregnant. At the time of the operation the question arose whether it would not be better to remove both ovaries, (1) on account of the presence of pulmonary tuberculosis; (2) with the idea of stopping the monthly hemorrhages. The right ovary, however, was not touched, as the evidences for removal were not considered clear enough.

CONSTITUTIONAL AMENORRHEA.

Case 2846. Mrs. W., age 31, Swedish, married twice, one child by first marriage. Menstruation began at 20. When she first came to the clinic, Aug. 22, 1900, she said she had menstruated scantily two weeks before. Complained of constant nausea and vomiting, with pains in epigastrium, in left hypochondrium, and under right shoulder. Legs and feet swelled. Patient appeared somewhat pale, but well nourished. Abdomen was quite large. Conjunctivae were yellow. Uterus was large and soft, and cervix softened. There was no decided blueness of vagina or pulsation of vaginal artery. She was given a gastric sedative and phosphate of soda. On September 11 a slight amount of bleeding from the cervix was noticed. Abdomen was smaller. Bimanual examination showed uterus and appendages normal. At this visit she acknowledged that she had treated for syphilis six months previously and that she was given to overindulgence in liquor. She was put on potassium iodid in increasing doses, and continued to attend the clinic irregularly, complaining often of nervous irritability and nausea. Her menses failed to reappear. Early in January, being called to visit her, found her confined in bed with pneumonia, surrounded by most unhygienic conditions. Necropsy made by Dr. Leland a few days later showed areas of bronchopneumonia in both lungs and cirrhosis of the liver. The omentum was adherent to liver and intestines at many points. The intestines floated on fluid walled in by peritoneal adhesions; uterus and appendages appeared normal.

RETROVERSION.

Case 2958. Mrs. S. G., aged 36, American, mother died of consumption; had measles, whooping-cough, and facial erysipelas as a child; menstruated at sixteen, married at twenty-eight; has never been pregnant. Menstruation has occurred regularly, and always been small in amount. Onset of period is accompanied by much leucorrhea and considerable pain in abdomen, chiefly in right ovarian region, and pain in rectum sharp and shooting. Pruritus pudendi also causes much annoyance. Appetite poor. Sleeps poorly. Bowels fairly regular. Bimanual examination showed retroversion of uterus and thickening in right broad ligament. Operation May 18, 1901; abdomen was opened; the uterus was found firmly fixed by two bands of adhesions running backward, one being attached to the fundus and the other lower down near the cervix. After the adhesions were broken up, the round ligaments were much relaxed, and were shortened by folding and stitching. The uterus was also suspended after Kelly's method and the abdomen closed in three layers. Recovery was uneventful.

Occidental Medical Times

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THE STATE BOARD OF HEALTH; ITS REPUDIATION OF A DEBT. ITS USE OF DETECTIVES.

The present State Board of Health and its predecessor, which went into office June 1, 1900, have not contributed much to the honor of medicine or to the integrity of the state of California. As is well known, a new board was organized upon the resignation of Dr. Louis Bazet, and upon the forcing out of office of Dr. Henderson by Governor Gage in June, 1900. Those appointed to the vacancies fulfilled the purpose of their election by persistent and malicious denial of certain facts. In January, 1901, it became incumbent upon his Excellency to fill several expired terms. In making these selections it was demanded of the applicants whether "they believed that bubonic plague ever existed in San Francisco." If they answered affirmatively, they were told that they were not wanted. This board evidently, therefore, was well calculated to follow in the footsteps of the old, and do the bidding of their master. They agreed to guard the health of our state by entering upon their duties on condition that they would not concede to the truth, and to facts that have been proven beyond all doubt by expert testimony of the highest scientific attainment, by men of unimpeachable integrity, by the United States Government, by medicine, and by the world; and ye men of California, behold the spectacle! How ennobling!

It has not been sufficient for them to accept office under conditions that are not calculated to inspire confidence, but they have gone a step further by repudiating an honest debt, due their bacteriologist, Dr. Ryfkogel, for work ordered by the board, as the following telegram will show:—

> Los Angeles, Cal., Aug. 13, 1900.
>
> Dr. Ryfkogel, Oakland Health Office: Please get specimens of white suspect who died in County Hospital, Saturday, and make cultures jointly with Dr. Mouser. Wire me today what you know of case.
>
> R. W. Hill, Pres't.

The report which is published on page 351 upon these cases, was made carefully, promptly, and at very considerable cost, and has been in the hands of the board since September 6, 1900. The simultaneous report of Dr. Mouser was published at once in the *Pacific Medical Journal* and afterwards in the report of the State Board, and was paid for in October, 1900; that under consideration has never been given to the public, and its concealment brought about a suit by the *Evening Bee*, of Sacramento, which is still pending before the Supreme Court. Not content with this, the board has allowed all kinds of innuendos to go forth compromising the integrity of Dr. Ryfkogel, and leading the people by inference to believe that the report denied that these cases died of plague. When Dr. Ryfkogel requested the *Pacific Medical Journal* to publish his report, the matter was passed by in silence, notwithstanding the following letter.

> Jan. 4, 1901.
>
> Dr. Winslow Anderson—Dear Doctor: I see by your editorial in the "Pacific Medical Journal" for December, that you are not fully informed as to my attitude on the plague question.
>
> At the last meeting of the State Board of Health, in Sacramento, at which you, I believe, were not present, and at which the joint report of Dr. Mouser and myself was read,

there was also presented a report signed by me alone which gave the results of my independent researches into the cause of the deaths of Hon Ton and William Murphy, and certain arguments demonstrating the absence of negative value in our joint failure to find the bacillus of bubonic plague in the tissue of the two men.

I have no doubt but that, owing to your absence from the meeting in question, the said individual report escaped your notice, and I inclose a copy to enable you to make your public statement of the facts complete.

I have just refused to give Dr. Kengla a copy of the said report, and forward this copy to you on the same grounds that Dr. Mouser handed you a copy of the joint report, namely, because you are a member of the State Board of Health, not because you are editor of the "Pacific Medical Journal."

Knowing that you wish the truth in this matter to prevail, yours, etc.,

(Signed) H. A. L. Ryfkogel.

San Francisco, July 15, 1901.

Mr. Daniel Kevane, Secretary State Board of Examiners of California—Sir: I have at different times made inquiries of you and Dr. Matthews, of the State Board of Health, in relation to my bill of $450 (that is, $250 for work upon two cases of plague in conjunction with Dr. S. M. Mouser, and $200 for studies on four other cases of the same disease).

You are, of course, well aware that had I charged at Dr. Mouser's rate of $350 per case, my bill would have amounted to $1,750, and the reason I did not make such a charge was that a member of the State Board of Health, Dr. Crowley, requested me to make the charge as low as possible, and that in accordance with his wish the amount of the bill was made but a little more than enough to cover actual expenses incurred.

As you know, Dr. Mouser's bill has been paid, and yet no attention has been given to mine, although rendered for the same joint investigation and under the same authority as Dr. Mouser's.

You know that while working with Dr. Mouser I conducted an independent investigation, the results of which and a review of the joint investigation invalidating our failure to find the bacillus of plague in pure culture in Dr. Mouser's laboratory, was reported at the same meeting at which the joint report was read.

You can not but fail to have learned that a member of the State Board of Health published, or caused to be published, in a medical journal owned or controlled by him, the statement or imputation that I had said the cases investigated by Dr. Mouser and myself were not plague, merely because we had failed to isolate the bacilli in pure culture in Dr. Mouser's laboratory, notwithstanding the fact that I said in the joint report that from my studies of the original tissues and animals inoculated therewith. I believed the cases were plague, and the further fact that in my independent report on the same cases I proved that the cause of the deaths of Wm. Murphy and Hon Ton was bubonic plague, and stated therein that in my independent work I had isolated the bacillus of plague in pure culture.

In support of his contention the above member of the State Board of Health published the joint report and omitted the independent report which for practical purposes was part and parcel of the joint report. I wrote to him and called his attention to this, and myself forwarded a copy of the omitted material, but up to the present no correction has been made.

So far I have taken no action to set myself right in this matter, because I felt that as the work had been ordered by the State Board of Health the reports belonged to them. If, however, you have decided to avoid the payment of my bill, I shall consider my obligation to silence at an end.

If, therefore, the amount in question is not in my hands by noon of July 25 I shall consider myself at liberty to make such disposition of all reports subsequent to that on the case of July 6, and the letter to Dr. Anderson, and the present letter to you, as I think best suited to my interests.

Notwithstanding any action I shall take in the matter, I still reserve my right to sue the state for the money that is justly due me for services rendered. Yours,

H. A. L. Ryfkogel.

It may be well to show here that the results of this work have been confirmed by a disinterested bacteriologist of world-wide repute.

Carnegie Laboratory, University and Bellevue Hospital Medical College.

November 1, 1900.

Dear Dr. Ryfkogel: The cultures you sent me,—the two tubes marked bacillus pestis, Cal.,—are identical with those I got from two cases of bubonic plague in New York Harbor last year, and also with two that I received from Dr. Wilson, of the Hoagland Laboratory, which he got from India. In my opinion they are undoubtedly cultures of the bubonic plague bacillus.

Very respectfully,
(Signed) William H. Park,
Prof. Bact. and Hygiene, University and Bellevue Hospital Medical College (Med. Dept. N. Y. University).

The concealment of this report, the failure on the part of the board to comply with the law, both as to its publication and the payment therefor, is another evidence of the rottenness of the present administration of our affairs. Never has California's name been so openly and boldly debauched. Men under oath have sacrificed their names and honor so wantonly that honest men have shrunk in horror at their boldness. Such moral turpitude is beyond comprehension.

It is unnecessary to go into detail in the matter of remuneration made by this board for work done and for work never done; the register of the state will show this, and it will also show how liberal the henchmen of Governor Henry T. Gage have been to themselves. It will disclose one item where a certain official was paid ten dollars a day for work in Chinatown during the month of March, 1901; of what kind, when or where done, nobody knows. It will also point out how costly and elegant have been the tastes of a few, and what a meager bill of fare was allowed others; it will make prominent how frequently some went in their own carriages to pay obeisance to his excellency, but did not fail to charge a very liberal fee for each visit, etc., but when a bill for worthy, reputable work is presented, the claim is disallowed.

Dr. Ryfkogel's commission as bacteriologist to the State Board of Health has never been revoked; hence the refusal to allow this bill becomes all the more deplorable. It is a just debt, and its repudiation an awful blot on the integrity of the state. To date Dr. Mouser has received $1,450, not so much for the scientific character of his work as for his denial of the existence of plague. Dr. Ryfkogel's report shows how reliable his deductions must be, and how scientific and expert his methods.

The most compromising act of the State Board in this connection is brought to light by the *Sacramento Evening Bee,* of September 5. The statement reads as follows:—

The State Board of Health has to-day drawn from the Contagious Disease Fund $1,878.49 on account of the bubonic plague investigation and clean-up in San Francisco. In the list of vouchers there is one which shows the class of work that has been done by the executive of the state of California in attempting to deny the existence of plague. The bill is from the Harry N. Morse Detective Service, and is as follows:—

San Francisco, July 1, 1901.

State Board of Health, to Harry N. Morse, Dr.

To services of operative L., shadowing Dr. R., May 29th to June 24th, 1901, 27 days, at $6 per day	$162 00
Car fares necessarily spent	7 70
To services of operative S., shadowing Dr. F., May 29th to June 10th, 1901, 13 days, at $6.00 per day	78 00
Car fares, etc.	55
To services of operative K., shadowing Dr. W., May 29th to June 10th, 1901, 13 days, at $6.00 per day	78 00
	$326 25

Appended to this is the following note:—

"Dr. W. M. Lawlor—My Dear Sir: Inclosed find bill for service rendered. The cause of so large an expense bill in the case of Dr. R. was owing to his being lame and unable to walk much. He took car money twice each day, also trips to Oakland.

"Respectfully yours,
"H. N. Morse."

There is appended to the claim the personal approval of Governor Henry T. Gage, and a request that a warrant be drawn for the amount.

The "Dr. R." referred to is undoubtedly Dr. H. A. L. Ryfkogel, formerly bacteriologist of the State Board of Health, and afterward employed by the Marine Hospital Service in its investigation of Chinatown. "Dr. J. M. F." is undoubtedly Dr. Flint, bacteriologist for the Marine Hospital Bureau, and "Dr. W." Dr. Joseph H. White, chief of the Quarantine Division of the Marine Hospital Service, and in charge of the Bureau at San Francisco. These government officials will undoubtedly be pleased to know that they were being shadowed, under the orders of Governor Gage, with whom they were supposed to be cooperating.

This use of public funds, sanctioned by Governor Gage and his commission, is an insult to men so well known and so honorable as Joseph H. White, J. M. Flint, and H. A. Ryfkogel; to the officers of the Marine Hospital service, and to the medical profession of America. Detectives are usually employed either for the detection of crime or to illegitimately manufacture evidence of it. It is preposterous to suppose that J. H. White, J. M. Flint, and H. A. L. Ryfkogel were guilty of any crime; it is equally preposterous to believe that they ever dreamed of any such connivance;

it is inconceivable that these men, whose characters and lives are beyond reproach either publicly or privately, could even be suspicioned of a criminal thought against the state, and yet they were followed as criminals. As no charges were ever brought against them, a thing that was impossible under the circumstances, the reason for this action is a little difficult to explain. However, the fiat had gone forth that there was no plague in California. These men were honest and reputable, and they were a menace to the lie. An agreement had been signed by various parties that plague was here, and that Chinatown should be cleansed by the State Board of Health under the supervision of Dr. White, while Drs. Flint and Ryfkogel should attend to the clinical, bacteriological, and pathological work. This compact gave Dr. White complete supervision. It had been agreed that all cases of sickness of a suspicious nature were to be reported to him, and that Dr. Flint was to examine them clinically. Their supposed privileges allowed them a wide field, but no plague was to be found; hence their movements were a matter of much concern; but why between the dates mentioned it is impossible of interpretation, unless at that time there were several cases in the Chinese quarter. It was all-important that what these men found should be known. No end of difficulties beset their paths. No case of acute disease was reported. One case at least of contagious disease was concealed. No chance to infect any bodies was given; the work of Kinyoun was not to be repeated. Therefore, that none of these things should be done, or that any case should come to light, these worthy men were shadowed.

It is natural to suppose, also, that information was sought by the perpetrators of this deed that would enable them to demand their removal. They had manufactured charges of murder, brutality, and criminal infection of bodies against Dr. Kinyoun, and it was equally as urgent that the community should be rid of his successors. Dr. White, while seeking enlarged powers, was suddenly recalled, and we have no doubt at the instigation of Gage's commission. The detective was taken off the trail of Dr. Ryfkogel before noon of June 24, who only received notice at 5 P. M. that he was no longer in the employ of the Treasury Department, which shows that Governor Gage knew of his dismissal before the doctor himself had been notified, and his Excellency was again successful. Drs. Flint and White were watched until they left the city. The following incident, which will scarcely be believed, is very pertinent to the question at issue, and is related to show to what depths of iniquity men will at times go when their guilty consciences are troubling them. It is the concoction of some one of the satellites of the state administration. Upon the deaths of the Japanese girls in July it was proposed to acknowledge the existence of the disease, and charge Drs. Kellogg and Ryfkogel with having murdered them, the object being to afford a loophole whereby the anti-plague adherents could escape from an embarrassing position. Just how this plot was to be worked out our informant was unable to explain.

Such a series of circumstances easily discloses the inward purpose of this shadowing. To one unacquainted with the details of this trouble, it is incomprehensible how the Chief Executive and men holding high favor in its councils and its commercial welfare could wilfully lend themselves to schemes so false and derogatory to the dignity of a commonwealth. Their actions bespeak an intensely low moral condition. These men proclaim themselves the representatives of the best and highest in the state; they belong to the professions of law and medicine, to the press, and to our political and economic bodies. Hence it is no wonder that our statements have occasionally been questioned by strangers to this peculiar system of truth and integrity. Certainly such reports are only worthy of lawless and unorganized colonies; yet we solemnly aver that all, and much worse than we have ever told, is true, to the everlasting disgrace of Henry T. Gage, his commission, and the medical men who have sold their honor—and for what?

THE SUPPRESSION OF CONTAGIOUS DISEASE.

LETTERS FROM DRS. WYMAN AND CARTER.

The following letters from Drs. Wyman and Carter, of the Marine Hospital Service, are cheerfully published with the hope that a very embarrassing series of circumstances will be cleared up. They deny some of the charges brought out in our issue of August with regard to the quarantine of 1898 at New Orleans. That the state and local authorities at New Orleans used every means to suppress the fact that the disease existed has been proven before the courts. These letters do not deny the facts, but relieve Dr. Wyman from the charge of having raised the quarantine. From the testimony presented in the courts of Louisiana the methods pursued there were bad, but, as Dr. Carter says, they did not compare with California's record.

Washington, September 11, 1901.

In your issue for August, under the caption "The Suppression of Truth of the Existence of Contagious Disease," you published a letter taken from the "Evening Bee," of Sacramento, of July 17, 1901, signed by John C. McKowen, M. D., of Clinton, Louisiana, and dated July 4, 1901, relating to raising of quarantine, on account of yellow fever, in 1898.

I quote from Dr. McKowen's letter as follows:—

"After a commission from these commercial interests had gone to Washington, Wyman came to New Orleans about the middle of October, where he was wined and dined by the commercial men at my club, the Boston, and, as a consequence, Wyman took off the quarantine about the middle of October. On the morning of the day when New Orleans was declared by Wyman to be free from yellow fever, five new cases of that disease were admitted to the wards for white men in the Charity Hospital, . . . so that at least 1,000 cases of yellow fever existed in New Orleans when Wyman gave out the official falsehood that the city was free from that disease. . . . Visitors ran back to the northern states from New Orleans after returning to it to find that the official dictum of Wyman was as false as that of Souchon. Dr. Carter was sent away from New Orleans for two reasons: Carter was anxious to escape from the morally vicious atmosphere of New Orleans, and he was too honest for Wyman's plans."

I have to request that you will publish the following denials:—

I did not declare New Orleans free from yellow fever.

I did not take off the quarantine about the middle of October.

Dr. Carter was not sent away for the reasons given, nor was he ordered from New Orleans until the following January.

By reference to the annual report of the Marine Hospital Service for 1898, page 556, et seq., it will be seen that the raising of quarantine in the south was gradual. The reasons for raising it,—lateness of the season, cold weather, light frosts in New Orleans and Franklin as early as October 17, and earlier in other sections,—while pertinent, need not be here discussed. In the two states which had yellow fever (Louisiana and Mississippi), no new foci of infection were reported after October 16. The "raising" was all done while I was away on a tour of inspection in the south. The State Board of Health of Louisiana, by circular, raised quarantine against New Orleans, in so far as they could legally raise it, October 12, but the notification was not received at the Marine Hospital Bureau until after my departure, and I had nothing personally to do with it. Service measures to protect other states were continued for some time subsequently.

I left Washington the middle of October, and successively visited Chattanooga, Atlanta, Jacksonville, Egmont Key, Fla., Montgomery. Mobile, Camp Fontainebleau, New Orleans, Jackson, Mississippi, Memphis, Vicksburg, and Nashville. I arrived at New Orleans October 24, and on the 25th left for Jackson, Mississippi. As I reached New Orleans October 24, and the state had raised the quarantine October 12, it is difficult to understand how the state action was consequent upon my visit, nor could I, myself, have raised the quarantine "about the middle of October" "as a consequence of this visit." Between the middle and the 24th of October there had been light frost in New Orleans, but nevertheless some measures were sustained by the service until October 31.

At no time in the year 1898 did I give out the "official falsehood" that New Orleans was free from yellow fever.

Dr. McKowen's intimation of some connection between the visit to Washington of a commission representing the commercial interests of New Orleans and my subsequent visit to New Orleans is also unfounded. I do not recall a visit from such a commission, and even if there were, it had no causative relation at all to my official tour of inspection, including New Orleans, which is detailed above.

I have the honor to remain very truly yours,
Walter Wyman.

Baltimore, Md., September 21, 1901.

In your editorial of August, 1901, you quote a letter of Dr. McKowen, of Louisiana. In this letter and in your remarks thereon I am mentioned as doing certain things and as actuated by certain motives, and I will be glad if you will allow me to correct some errors therein which appertain to myself. The rest of the letter is not my concern.

In 1898 the quarantine for yellow fever was raised by the states of Mississippi and Tennessee on October 20; by Alabama, for all points of Alabama north of Siluria, on the same date; by the western parishes of Louisiana, except Caddo and Calcasien, on October 23 or 24. I think the date for the remainder of Alabama was the same—23d or 24th of October; Florida, on October 30. I give these dates from memory, but I think they are correct. I consulted with the Mississippi State Board of Health and those of the western parishes, as well as with the Health Officer of Alabama, and advised this action. I know that Dr. Wyman in nowise influenced the removal of any quarantine this year, the matter being left to the discretion of the officer on the ground, and I had no communication with him on the subject. Understand that these quarantines were not only raised against New Orleans, but, so far as yellow fever was concerned, against all points; that they were not raised because of the cessation, or any claim of cessation, of yellow fever at the places where it had been prevailing, but because of the occurrence of frost at the places which had been quarantining. There was yellow fever then existing not only at New Orleans (as Dr. McKowen says), but probably at a dozen other places in Louisiana, at Jackson, and nearly as many in Mississippi, and this was known to the health officers raising the quarantine. But yellow fever, although it will spread some time after frost where it is prevailing, can not be introduced into a place after there has been a fair frost at that place. Quarantine was raised then on account of the weather condition of the places raising it, and not on account of the sanitary conditions of the places quarantined, just as the yellow fever quarantine against tropical America is raised every year from October to May, although yellow fever exists there the year round, and is especially bad in Rio in January, February, and March. I do not know when New Orleans was "pronounced free from yellow fever." I do know that it was never so pronounced by Dr. Wyman, there being no reason why he should do so. The fever after an epidemic usually lasts into January or February. It may also be noted that Dr. Wyman did not visit New Orleans until after the quarantines in the south had been generally raised. The date, I think, was the 26th or 27th of October. I know it was after the quarantine of the western parishes of Mississippi and north Alabama were raised.

In conclusion I would say that, while in the management of an epidemic one must do a good deal "off his own bat," yet in this one, as in four other yellow fever epidemics in which I have been more or less in charge of the Marine Hospital work, I received all the support from Dr. Wyman which he could give or which was needed.

In my experience the announcement of the presence of a disease liable to quarantine has usually been resented by the community among whom it prevails, although never to the extent as at San Francisco. It is at best an unthankful task, although the purely Anglo-Saxon communities of the south showed usually a high sense of civic duty, and would themselves adopt and carry out, to their own loss, the measures necessary to protect their neighbors.

Respectfully,
H. R. Carter,
Surgeon, U. S. M. H. S.

MORE PLAGUE.

Although the State Board of Health of California has strenuously denied that there has been any plague in California, seven more cases have occurred: one, a Chinaman, August 31, dead; a second, September 11, a Chinaman, still living; a third, 13th, a white man, who will recover; a fourth, 14th, a Chinaman, dead; a fifth, 26th, a white woman, dead; a sixth, 27th, a Chinaman, dead; a seventh, 29th, Chinaman, dead. One of the living cases, a white man, an habitue of the Chinese quarter, has been treated at the Marine Hospital; the other, a Chinaman, is under the care of the local Board of Health at the "Oriental Hospital," 833 Washington Street, the city quarantine hospital. Recently the State Board has ordered the local Board to raise its quarantine over this case, which the latter has positively refused to do, thus, we hope, bringing the question of plague to a settlement in the courts. We believe, however, that the State Board will not force the issue.

As no measures of inspection, disinfection, or quarantine, except the tentative ones of the local Board, are being taken, our city and state are at the mercy of a possible epidemic. The local Board is and has always been severely handicapped by its financial condition, and the State Board yet stultifies itself by its false declarations. There is but one remedy, and we hope that will never come, though circumstances are propitious. The rainy season is on, and several thousand Chinamen are returning from the grain fields, orchards, and canneries. If history repeats itself, our position is full of peril. These eight cases, occurring early in the rainy season and having been found when determined efforts are being made to conceal them, and when no inspection is being carried on, and after the place has been cleaned and disinfected by the State Board under the supervision of the Marine Hospital service, does not render the situation in any degree inspiring. It is well to note that the methods of disinfection and sanitation recently completed were those adopted by the governor of this state and the commercial interests. A scheme was proposed by Surgeon J. H. White, of the Marine Hospital service, which would have been more effective, but was rejected because of its thoroughness and expense, so that any blame for the ineffectiveness of the recent measures must be placed where it properly belongs. Should an epidemic ever occur, the people of this state will condemn the Marine Hospital service for not effacing the disease. They will forget who is to blame, and the very men who conciliated—Wyman, Gage, and senators—and who formulated the plans followed, will be the very first to cry out and condemn the man whom they made to bear the burden of their misdeeds and the service they hate.

LANE MEDICAL LECTURES.

The Lane Medical Lectures for the year 1901 were delivered by Mr. Malcolm Morris, of London. The attendance was possibly the largest of any of the series. Notwithstanding the fact that Mr. Morris used his manuscript freely, these lectures were delivered in so affective a manner as to completely hold the attention of his audience. His manner was so sincere, plain, and earnest that nothing but enthusiasm was exhibited on all sides. The subject matter of the lectures did not include a strictly technical discourse on dermatology, but a higher, wider aspect, embracing certain points which were never before treated as a whole. The theme was based on skin diseases: (1) As they affect the individual in his relation to his social environment; (2) as they affect health, prosperity, and development of the community of which he forms a unit. He therefore took up the social and political side of the question, giving enough technical dermatology to rivet the attention of his audience. Certainly his choice of matter was excellent; he went deeply enough into the subject to make his lectures learned, and delivered them so gracefully and unassumingly as to make this course one of the most successful of the series.

WASHOE COUNTY MEDICAL SOCIETY. A NEW SOCIETY.

It is just possible that the plan of reorganization adopted by the American Medical Association at its last meeting, has infused a spirit of progress and a desire on the part of medical men to cooperate with the aspirations of our national body. Not only have our local societies recently given evidence of an effort to shake off the lethargy that has enshrouded them for years, but our sister state, Nevada, has organized a new and promising society at Reno. Its prospectus gives every hope that it will rise to an influential body, and maintain, through the efficiency of its energetic officers, the name of medicine to a most honorable degree. Its aim and object are fully explained as follows:—

"On the 20th of July the physicians of Reno, Nevada, met and organized the Washoe County Medical Society.

"The by-laws state that the object of the society is to promote and foster medical science and the general welfare of its members. A fee bill similar to that adopted by the Alameda County Medical Society was adopted. The society meets once a month, when papers are read and discussed by its members. Several meetings have been held, and considerable interest is being manifested."

The following officers have been elected for the year: Dr. H. H. Hogan, president; Dr. G. H. Thomas, vice-president; Dr. S. E. D. Pinniger, secretary; Dr. Geo. Fei, treasurer.

SOCIETY PROCEEDINGS.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting Sept. 10, 1901.

The president, Dr. G. H. Evans, in the chair.

MUTIPLE SYMMETRICAL LIPOMA.

Dr. W. F. McNutt presented a case of multiple symmetrical lipoma.

Dr. Rosenstirn: The technical term for this disease is multiple symmetrical lipomata. It is a distinct disease, and described as such. The theory of its origin, especially as to its bilateral symmetry, as observed so evidently in this case, is not entirely clear. It has been thought that it was due to cerebral lesion in the sweat-producing centers, and that a local compensatory accumulation of fat in the peripheral regions affected by the central lesion accounted for the fatty growths. This theory was first advocated by Dr. Gross about ten years ago, and has been favorably considered. I once presented a patient here who suffered from the same disease, only in a more pronounced form, and I endeavored to furnish some experimental support for this theory. I was able, by the use of hypodermic injections of pilocarpin, to produce a profuse perspiration, except in those parts occupied by lipomata, showing that the sweat glands in these regions were not active. The patient perspired all over the body, with the exception of those parts where the lipomata were located. He had an extremely large lipoma in and around the neck, and this region, where one usually perspires freely, was perfectly dry under the action of pilocarpin, whilst a control patient perspired freely after each injection of the same dosage. I had another case that I operated on, who also had these multiple lipomata, but, after I removed a large lipoma from the posterior cervico-dorsal region, and wanted to experiment, the patient left me.

Dr. McNutt: I should think that the failure of the pilocarpin to act over the surface of the tumor would be entirely owing to mechanical pressure.

It is functional derangement due to mechanical pressure. You can not expect that the ducts would act as well where the skin is stretched. That would be a possible explanation.

Dr. Rosenstirn: I had at the same time a negro on whom I experimented, and who had a cartilaginous tumor, a chondroma. I published this case in the "New York Medical Record" some ten years ago, and there was perspiration on the skin, while in this man there was none.

Dr. Levison: It might not be out of place here to mention a condition which recently came under my observation. One case was an epithelioma, the size of a hen's egg, which was removed from the buttock of an old man of 70 years. Clinically the diagnosis was made of a lipoma, which had undergone malignant degeneration. This was quite apparent, as part of the tumor was plainly fatty, while the remainder was unquestionably malignant. The inguinal glands on the corresponding side were indurated. It is not unusual to see benign growths which have undergone malignant degeneration, but it is seldom that a lipoma is seen undergoing this change.

DIABETES.

Dr. C. M. Richter: The theory that Dr. Jellinek has brought before us is interesting, but it is necessary to say that it is impossible to prove it. He said that it was necessary to bring carbon into the system. Both Naunyn and Van Orden treat cachectic men suffering from diabetes with strict meat diet, which does not give carbon at all, and still cachectic patients get better and remain better until carbon can be given again. It will probably take a long time to know positively the correct facts of the chemistry of the cells, as the working of it can not be brought before our eyes. It is necessary to-day that physicians, especially when treating patients with diabetes, should know a great deal about food, should know what a calorie is, and how much albumin, fat, and carbohydrates are taken in each article of food. However, these figures of food values are by far not as stable as they should be. For instance, it is said by Van Orden that it is necessary that a man should take 150 grams of albumin a day. Only recently Professor Bael, before the Berlin Medical Society, claimed that the Japanese, who is a vegetarian, may do a great deal more work than a man taking 150 grams of albumin. From this it looks as though all food laws will have to be changed in the future. Undoubtedly the cardio-vascular system plays a great role in diabetes. For instance, the most severe cases we find are at the ages when the cardio-vascular system is undergoing the greatest change, as at puberty and old age. When we see a case of diabetes in a young man or girl of fourteen or fifteen, it is of a severe nature. When we examine the case, we will almost invariably find vasomotor disturbances. The child may be of hysterical parents, and, if we examine from day to day, we will find the greatest change in the heart's action and in the pulse, especially in the central regions of the body. I have had a patient 16 years of age. The first symptom appeared after he had diphtheria. His father and mother were hysterical. When I examined him first, he had had diabetes for one-half year, about 5 per cent sugar. Heart was dilated, liver large, weak pulse, weak heart's action, etc. I prescribed strychnin to increase the heart's action, and the percentage of sugar went down without change of food at all. After a while, when the condition of the heart was better, he would take more exercise than he should, and at once the sugar would appear again. He was allowed to take only a certain time each day for exercise, and the sugar disappeared again. It seemed to depend upon the condition of the heart's action. The same thing occurs in old people; if weak, they get more sugar. If we treat diabetes in regard to heart's action, there will be better results, and I believe that the practitioner should pay special attention to the cardio-vascular system of the patient.

Dr. J. Rosenstirn: I would also say a few words as to the theory advocated by Dr. Jellinek, but in a different key from the previous speaker, as I believe Dr. Richter's arguments speak rather for the theory of irritation than against it. We can imagine that the irritation due to the piqure in the brain will reach certain parts of the body through the nervous system and cause irritative conditions, and this would support the idea expressed in the theory. But there has lately been discovered a glycosuria of renal origin, which has been used in aiding in the diagnosis of renal trouble. It is caused by the introduction of phlorizin into the body, whereupon sugar appears in the urine. It is called phlorizin diabetes. Casper, who was the first to experiment with it, showed, by the aid of the ureteral catheters with his cystoscope, that the urine from a diseased kidney shows a relatively smaller percentage of sugar than that of its mate, according to the proportion of tissue involved. This demonstrates the phlorizin diabetes to be simply renal secretory process, due to the direct action of the phlorizin on the healthy renal tissue. To be sure, we must admit that the plausibility of the theory advanced by Kolisch, and given to us by Dr. Jellinek, has a great deal of charm and explains a great many interesting points in the mysterious field of diabetes.

Dr. Perry: One point in the dietetic treatment of diabetes is to maintain an equilibrium of weight. The treatment I found to be of most benefit is to give twice the amount of animal food and as little carbohydrate food as will be sufficient to maintain weight. The carbohydrate food I give as toast, browned all the way through, and I give as much as one-half pound a day, and aid the assimilation with extract of malt. With this the patient maintains the strength and weight, and, although they have a little sugar in the urine, I pay no attention to it. This is far better than giving the drugs, which are supposed to lessen the amount of sugar. I agree with Dr. Jellinek in regard to the diet treatment, but it is necessary to give some limit to the amount of fat. He prescribes it in indefinite quantities. You can not give more than 120 grams of fat, as it produces irritation of the stomach and intestines.

Dr. Ebright: One thing Dr. Jellinek's paper called attention to was that, when the mustard was taken, the sugar raised. The case I call your attention to was a user of strong coffee and tobacco, and in connection with the fact that caffein will cause sugar in the urine, will throw some light on the occurrence of diabetes in certain patients.

Dr. Jellinek: In answer to the statement made by Dr. Richter concerning the "picture," I wish to state that, instead of contradicting my theory, it coincides with it. According to my conception of metabolism, as has just been explained, it is easy to understand how a shock to the nervous system, such as would result from the "picture," is liable to disturb the metabolic equilibrium, with a consequent irritation of the cells, which respond to this irritation by the splitting up of their own carbohydrates into sugar. In this manner only can be explained the cases of sudden development of diabetes. Dr. Richter mentions that Van Norden interdicts the administration of fat in the cachectic state, a statement which is not at all clear to me. As before stated, the cachectic dies from povverty of carbon in his tissues, which must be replaced, for the vital process (life) can not be sustained if combustion of carbon does not occur. In regard to "phlorizin glycosuria," I wish to state that this condition does not enter into this discussion, as this form of glycosuria is of renal origin, which Zuntz has recently proven. He injected this substance into one renal artery, which resulted in the immediate appearance of sugar in the urine, while sugar appeared in the urine excreted by the other kidney only after one-half hour. Furthermore, when phlorizin is given a patient in moderate quantities, sugar appears in the urine, but never in the blood as glycaemia.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting Aug. 27, 1901.

Dr. W. Montgomery, the president, in the chair.

SKIN GRAFTING IN X-RAY BURNS.

DR. HUNTINGTON'S CASE.

Dr. Grass: I would like to ask if the silver foil is perforated.

Dr. T. W. Huntington: It is the same silver foil that is used in the trades, and is laid on in blocks of a good many layers. There is no difficulty in adjusting it. It is like an impalpable powder, and does not preclude drainage from the wound at all, but lies in perfect apposition to the skin. There seems to be a peculiar chemical change that takes place after the moisture comes in contact with it. I think an oxide is formed. It is aseptic and slightly antiseptic and a non-irritant. It has been used at the Johns Hopkins Hospital for the past ten years, and is rapidly coming into vogue. I rely upon it exclusively. I use with it the silver salt, citrate of silver, and put a little along the marginal end of the wound, but rely chiefly on the silver foil. One feature of it is the ease with which the dressing can be removed without adhesion.

Dr. J. D. Arnold: I saw in a journal that covering the exposed skin with a heavy, transparent ointment would prevent burning.

J. Henry Barbat: I have used collodion with the gauze to close clean wounds, and can not say that I have seen any bad results. If the wound is clean, there is no disadvantage in using it. I keep the collodion dressing on for four weeks, and it acts as a splint, and prevents spreading of the skin. With the X-ray there is no need to burn, except where one treats with the X-ray, and then you may get a burn. Even in that case there is no need to burn unless you want to. I have burnt a patient slightly on purpose to get the inflammatory action, but there is no necessity now in taking a skiograph to burn the skin.

Dr. Dudley Tait: In Johns Hopkins Hospital they have made careful comparisons between the advantages of gauze collodion and silver foil dressings, and have dropped the first entirely. I have used it for two years, and came to the conclusion that the silver foil is the best. There is a little point in the Thiersch graft that is of interest, and that is the advisability of overlapping or not of the grafts. I find when the graft is not overlapped, we get an area of granulation. If we overlap, a certain amount of skin disappears, but there is a perfect line between the graft and the skin, and we do not get the cicatricial tissue that always accompanies the granulation tissue.

Dr. Arnold: I wish to refer to a fact that two years ago I saw a lupus under Bosworth's treatment in New York, which was treated with the static machine. Four or five applications were made, and no provision was made to protect the face, except the eyes. After four or five applications of ten to thirty minutes, two or three large sloughs made their appearance on the left cheek. There was no slough formed after the precaution was taken to cover everything but the lupoid area, and there was no effect except that desired.

Dr. D. W. Montgomery: The patient came to me some time before Dr. Huntington saw it. He was then suffering excruciating pain. It was not only tender, but was spontaneously painful. I tried simple ointments, such as balsam Peru, red oxide of mercury ointment, with temporary benefit, and then there would be a relapse. The best dressing I used was a 3 or 4 per cent solution of lysol. This gave ease and comfort for some time, and it looked as if the wound was going to heal, but then it became worse again. I showed it to the society, and Dr. Huntington said he thought he had a plan for such a wound. The interesting part to me is that the doctor went in under the skin, and the skin was stitched to the aponeurosis of the muscle. All of the fat and a part of the aponeurosis were removed. It is very interesting to me to know that he went in in a flaring direction, but I suppose that is the direction of the rays. The result is excellent.

Dr. Huntington: I would like to say a word in regard to silver-foil dressing. I am impressed with the fact that it is extremely pedantic for any person to use none but his own methods. I think any clean dressing will give good results. We have all done it, and at times were satisfied, and sometimes humiliated. I do not wish to offer statistics, but I am impressed that my work is better than the work I have done before. Professor Halstead and others at Johns Hopkins Hospital have recommended it after careful experimentation and tabulation. Taking a large number of cases, and taking scrapings from the wound after three to five days, and examining them under the microscope, and using the culture method, I found the evidence under the skin graft better than in any other method. I have decided to adhere to that method, and feel justified in following that plan, and I do not think I will go back to the sealing of wounds. I have found, and others have, that the closed sealing of wounds will give you now and then an accumulation under the skin that is better outside than inside.

THE SUBDURAL ROUTE IN THERAPEUTICS.

Dr. J. Henry Barbat: My experience is limited to one case before spinal cocainization came into vogue. I had a case of spinal congestion, and, after trying all kinds of medicine, I thought by putting cocain in I would relieve the condition. I made the mistake of drawing off two drams of cerebro-spinal fluid. The girl had relief for two hours, and was then worse than before. I dropped that method years ago.

Dr. H. M. Sherman: There is one question I would like to ask, Is this recommended as a route for general medication?

Dr. Dudley Tait: The gentleman who first proposed it advised that it be used in place of the intravenous method. It is more complicated than the subcutaneous, but less so than the intravenous.

Dr. L. Newark: I saw Dr. Morton do an injection Sunday for severe neuralgia of the superior alveolar nerve, second branch of the trigeminus. It was very rebellious to all medical treatment, and I was in despair. Dr. Morton guaranteed to produce analgesia all over the body, and was successful in doing that. When he made that claim at the County Medical Society, Dr. Caglieri said it was preposterous, and, if he did it, he hypnotized the patient. Dr. Morton has gone on record in the Philadelphia and American Medical Association journals that he can do it. The corneal sensibility was reduced and the patient was relieved for a while, but the pain never entirely disappeared. The movement of the jaw, which, before the injection, would produce paroxysms of pain, could be moved freely, but the effect was not altogether complete. In two hours the pain was the same. He injected 20 minims of a 2 per cent solution.

Dr. Huntington: I would like to ask Dr. Newmark a question as to whether he thinks the possible result in a case like that would warrant the risk taken.

Dr. Newmark: Dr. Morton said there was no risk, as he did it in hundreds of cases, and I was prompted to use it. The patient was in the office and told me of a numbness in the feet, but it did not spread up very far.

Dr. Huntington: In the fatal case he had, he appends that the autopsy showed a bad heart, and that death was not due to the anesthetic. I do not think that the statement would live in the minds of right-minded persons. I do not think it is a safe method. Taking the method up to the present time, all right-minded persons ought to condemn it, especially if any person uses it continually. Of course, there are cases where it should be used, but they should be carefully selected.

Dr. Gross: The same discussion is still going on in Paris, and Tarnier claims and does not believe a death after the injection can be due to cocain, if the autopsy showed organic lesions.

Dr. T. W. Huntington: Then there are no deaths from anesthesia, and chloroform and ether are devoid of all danger, because there is no person living in whom no lesion can be found. I do not believe in this attempt at dodging an issue.

Dr. Newmark: I heard that Dr. Morton produced analgesia for excision of the tongue. I interviewed Dr. Kenyon first, and he said the analgesia was satisfactory, and that the patient was perfectly satisfied, and the only pain was when the artery was tied. I heard from another source that the man struggled. and it took four or five men to hold him.

Dr. Terry: I saw the man struggle, and it was during the tying of the tongue. When he cut the mucous membrane, he made no objection, but when he got to the bottom of the tongue, the man struggled and yelled.

Dr. J. Henry Barbat: In regard to the post-operative effects, I read of a case this evening where the operation was done, and nine days after the patient developed a paraplegia lasting four or five weeks, which was evidently due to irritation of the spinal cord.

Dr. Dudley Tait: The general opinion in Paris is that the method is a good one. Something must be found that is less dangerous than cocain. Tropococain is superior, but not so reliable. As for cocain, one injection might produce analgesia of the entire body, but ordinarily up to the umbilicus. Why we get, under certain circumstances, entire analgesia, I do not know. The most interesting facts of late are the post-operative phenomena, headache, etc. If you tap the canal a few days after the operation, in many cases you will find that the liquid is not clear. It is sterile, but there are numerous lymphocytes and many cells. On the contrary, in the cases not followed by headache, the liquid is clear, hence it is advised to draw off some fluid, add the drug to it, and introduce the fluid again. This has proven a good method.

MEDICAL NEWS.

NICHOLAS SENN PRIZE MEDAL.

The committee on the Senn Medal beg leave to call attention to the following conditions governing the competition for this medal for 1902:—

1. A gold medal of suitable design is to be conferred upon the member of the American Medical Association who shall present the best essay upon some surgical subject.

2. This medal will be known as the Nicholas Senn Prize Medal.

3. The award will be made under the following conditions: (a) The name of the author of each competing essay shall be enclosed in a sealed envelope bearing a suitable motto or device, the essay itself bearing the same motto or device. The title of the successful essay and the motto or device is to be read at the meeting at which the award is made, and the corresponding envelope to be then and there opened, and the name of the successful author announced. (b) All successful essays become the property of the association. (c) The medal shall be conferred and honorable mention made of the two other essays considered worthy of this distinction, at a general meeting of the association. (d) The competition is to be confined to those who at the time of entering the competition, as well as at the time of conferring the medal, shall be members of the American Medical Association. (e) The competition for the medal will be closed three months before the next annual meeting of the American Medical Association, and no essays will be received after March 1, 1902.

Communications may be addressed to any member of the committee, consisting of the following: Dr. Herbert L. Burrell, 22 Newbury Street, Boston, Mass.; Dr. Edward Martin, 415 S. 15th Street, Philadelphia, Pa.; Dr. Charles H. Mayo, Rochester, Minn.